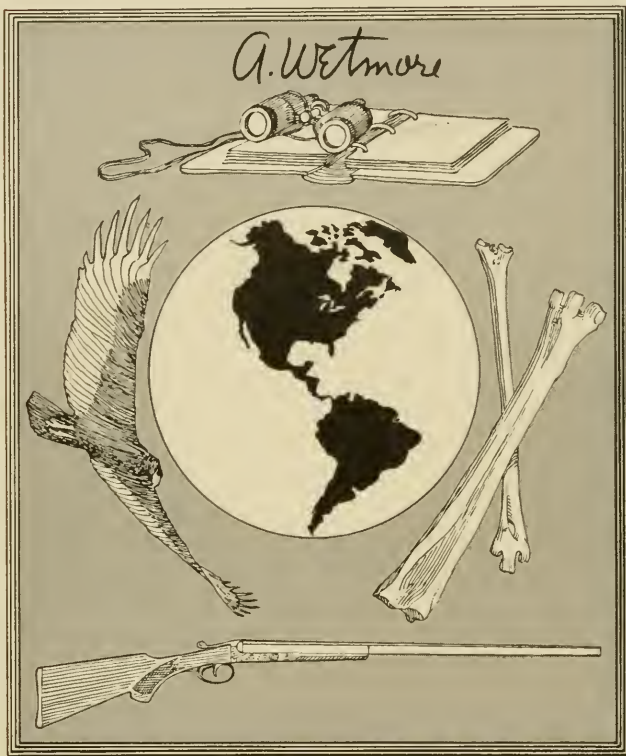




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The Birds of Devon.

ODE TO A PAIR OF RING-OUZELS.

A deep and solemn silence broods
Over the breezy solitudes
Whereon the mountaineer intrudes
 To crown a summer climb :
The soaring lark, a dreamy bee,
A pipit twittering from the lea
Beguiled the journey, but no glee
 Disturbs the peak sublime.

Yet music haunts it, and ere long
From some wild crag will float a song,
Perchance the protest loud and strong
 Of one who brooks no guest ;
Perhaps a love-plaint true and clear,
Meant to attract the distant ear
Of wandering mate called back to cheer,
 Or mind the busy nest.

Sweep the grey boulders, and you soon
Shall see the form whence flows the tune,
And mark a crescent like the moon,
 Beneath a sable throat,
With golden lips that warble till
The yearnings melt into a trill
Of joy, as flitting round the hill
 The truant hears his note.

MARCUS S. C. RICKARDS, M.A., F.L.S.,
in "Songs of Universal Life."



Litho. W. Greve, Berlin.

YES TOR.

THE HOME OF THE RING OUZEL.

From a sketch by the late William Henry M. D'Urban.

THE
BIRDS OF DEVON.

BY

W. S. M. D'URBAN, F.L.S., F.E.S.,
FORMERLY CURATOR OF THE ALBERT MEMORIAL
MUSEUM, EXETER,

AND

THE REV. MURRAY A. MATHEW, M.A., F.L.S.,
MEMBER OF THE BRITISH ORNITHOLOGISTS' UNION,
VICAR OF BUCKLAND DINHAM, SOMERSET.

*WITH AN INTRODUCTION AND SOME REMARKS ON THE
MIGRATIONS OF DEVONSHIRE BIRDS.*

ILLUSTRATED BY COLOURED PLATES, PHOTOGRAPHS, AND MAPS.

LONDON :

R. H. PORTER, 18 PRINCES STREET, CAVENDISH SQUARE.
1892.

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RED LION COURT, FLEET STREET.

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1872
SCNHRB

THIS BOOK
ON THE BIRDS OF DEVON

IS INSCRIBED

TO THE MEMORY

OF

FOUR OLD FRIENDS,

FELLOW WORKERS IN DEVONSHIRE NATURAL HISTORY,

WILLIAM BRODRICK,

JOHN GATCOMBE,

JOHN HELLINS,

WILLIAM STRONG HORE,

IN ACKNOWLEDGMENT OF ASSISTANCE

RENDERED BY THEM

TO THE AUTHORS

IN BY-GONE YEARS.

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ERRATA.



THE Authors regret that, in transcribing certain portions of their manuscript for the press, slips were made which escaped their attention when revising the proofs. Round brackets should have been put to the names of the original describers of the Wheatear, Yellow Wagtail, Meadow-Pipit, Tree-Pipit, Water-Pipit, and Rock-Pipit. The name *Sylvia cinerea* (p. 17) was Bechstein's, and *Regulus cristatus* (p. 21) was K. L. Koch's, neither being Linnean names, and *Regulus ignicapillus* (p. 22) was C. L. Brehm's, not Temminck's.

Page	line	
62	2	for Aberdavine read Aberdevine.
63	10	for being from read being made from.
64	15	for Withycombe read Widecombe.
77	19	for concentric read crescentic.
86	8	for Austin read Anstice.
99	5	for Muswell read Morwell.
102	4	for In read On.
114	29	for Seaward read Seward.
158	7	for Spriddlestowe read Spriddlestone.
164	45	for Chebiton read Chebitor.
185	28	for 1878 read 1870.
186	15	for Tapeley read Tapley.
190	36	delete Dusky Shearwater.
194	26	for Foot read Foote.
206	25	for Street read Strete.
214	43	for shot at Bude. Seven read shot at Bude and seven.
217	16	for when read where.
222	17	for waning read waxing.
236	20	delete two after only.
262	32	for Pheasant read Pheasant's.
263	6	for with white "horse-shoe" on read with a white "horse-shoe" on the.
272	31	delete under before the sole protection.
275	19	for perdu read perdue.
365	34	for Foot read Foote.
412	38	for Lydstone read Lydston.

INTRODUCTION.



THE County Histories of Birds, so many of which have been published of late years, have helped to show that in the British Isles, considering their area, the Avifauna is very dissimilar in its distribution. The East differs from the West, the North from the South, an inland county from a maritime one, in variety and number of species. This arises from many causes, the chief depending upon the points at which migrating birds arrive and depart, and these landing-places are selected according to the position of the mountain-ranges and the character of the coast-line. County histories of birds also serve to indicate the changes in a local Ornis since pre-railway times. Much might be written as to the influence of railways upon our native Fauna: they have invaded quiet bird-sanctuaries; they have rendered others accessible to gunners from a distance; they have carried the "collector" everywhere; they have prompted and made possible the improvements in agriculture of the present day, which while they have banished some birds have conduced to the multiplication of others.

Devonshire, with a list of birds almost equal in extent and in interest to that of the favoured county of Norfolk, or perhaps even of Yorkshire, is classical ground, because of the home it afforded for some years at Kingsbridge to Col. Montagu, one of the Fathers of British Ornithology, who there made some of his most important observations. It has been with a deep sense both of the importance as well as of the difficulties of their task that the Authors of the present book have attempted to prepare such an account of its Birds as may be worthy of so grandly diversified a county. They did not fail to meet the difficulties which arose from the obscure determination of some birds by earlier writers; from lists of old

collections containing specimens of rarities obtained from dealers ; from the multiplicity of records not free from mistakes, some of them detected, others possibly still unwittingly perpetuated in spite of exhaustive inquiries ; and in several instances statements made on what appeared to be reliable authority were only at the last moment discovered to be erroneous. And yet the Authors may claim with some confidence their title to present (if any can) a satisfactory statement of the Ornis of their county. They are no crude beginners, likely to be led astray by enthusiasm to adopt, without careful sifting, the startling reports of occurrences so frequently brought to their notice. They both had for many years the privilege of being associated with naturalists of established repute, such as William Brodrick, one of the authors of 'Falconry in the British Islands,' the Rev. W. S. Hore, the Rev. J. Hellins, E. H. Rodd, Cecil Smith, and last, although not least, J. Gatcombe, whose valuable notes on the birds of the district immediately around Plymouth were for so many years contributed to the 'Zoologist.' They themselves resided for a long period at localities, one in the north, the other in the south of the county, which gave them special opportunities for observing the birds of important districts, and none of any rarity could escape their knowledge. One of them has been a keen sportsman who in the spring and summer has wandered with his fly-rod by most of the delightful Devonshire trout-streams, while in the autumn moor and marsh, oozes and sand-flats, both in the north and south, have echoed to his gun, and many of the rarer birds have thus been studied in their haunts. The other, from his position for many years at the Albert Memorial Museum at Exeter, possessed facilities for acquiring information, as most of the rarities obtained in the south of the county were either brought to him or were at once reported : he has also been much abroad in South Africa, Canada, and California, and so has had opportunities of becoming acquainted with many rare British birds visiting those countries and of enlarging his experience. The one, some years ago, had projected and almost finished a work of some ambition, which should give an account of the Birds of the South-west Peninsula ; the other had long been collecting notes with a view to publishing a more accurate County List of Birds than had as yet been compiled.

Although a work on the 'Birds of Devonshire' has already been issued by Mr. W. E. H. Pidsley, it did not seem so thoroughly to exhaust the subject as to exclude another which should deal more fully with the numerous points of interest in the County Ornis. Directly the Authors began to consult on their project they at once perceived that it would be necessary to cover a somewhat wider field than the one to which that gentleman and his able editor, the Rev. H. A. Macpherson, had restricted themselves, if they were to produce anything more than a mere catalogue; for Devonshire forms but the central portion of the South-west Peninsula, and the migrations of birds, especially, can hardly be understood unless the adjoining counties to the east and west be considered with it. Some interesting facts bearing upon the preference of certain of the Ducks for the more opaque waters of the Bristol Channel have thus been brought to light; and the differences between the opposite portions of the county itself in their summer migrants, in the classes of the rare accidental visitors which either may expect to receive, as well as in the shore-birds which winter on the south while they desert the northern estuaries, have become apparent.

Devonshire has been the home of many eminent ornithologists, and although the existing *books* upon its birds are few, the *literature* bearing upon them is somewhat bulky, owing to the numerous county and local lists, and the many fugitive notes which have been supplied to the Transactions of learned societies, Guide-books, Magazines, Newspapers, &c. during the last century—some of them of interest and importance, of which the Authors have availed themselves, while many others of equal value have doubtless perished. They have naturally made use of their own notes, communicated in bygone years to the 'Zoologist,' which for half a century has furnished a storehouse for ornithological occurrences reported from every part of the kingdom; as also of information supplied them by numerous friends and correspondents—many of these, alas! no longer with them, such as those whose names have been already mentioned: and they have received much help from others—younger naturalists—who are keeping a close watch upon their respective districts, and may make their acknowledgments in the north of the county to the Rev. H. G. Heaven,

who is always ready to inform them of bird-affairs on his most picturesque island of Lundy ; to Mr. H. A. Evans of Westward Ho ! College, Bideford ; and to Mr. James Rowe of Barnstaple : while in the south Mr. E. A. S. Elliot and Messrs. H. and R. P. Nicholls of Kingsbridge have supplied numerous valuable notes respecting their favoured neighbourhood and the closely adjoining and celebrated Slapton Ley ; and the Rev. G. C. Green, of Modbury Vicarage, has been their correspondent who has recorded the rarer birds which he has noticed on the banks of the Erme. Nor must they fail to acknowledge their indebtedness to the President of the British Ornithologists' Union, Lord Lilford, who has not only taken great interest in their book while it was in progress, but has placed his notes on Devonshire birds at their disposal. Nor does this by any means exhaust the names of those who have kindly contributed information, of whom mention is made further on.

Some difficulty has been experienced in fitting together two manuscripts prepared independently of each other, and it was impossible to avoid occasional repetitions without recasting the whole. As the Authors reside far apart, a constant correspondence was necessary to settle all the details of the work, and this has entailed much extra labour and created much difficulty.

The nomenclature and arrangement which have been followed are those adopted by the Committee of the British Ornithologists' Union in the List of British Birds known as the "Ibis List," published in 1883. A few alterations have been made here and there, rendered necessary by the publication of Mr. Howard Saunders's useful 'Manual of British Birds.' Although the Authors have thought it desirable to follow this List, as the best, it can only be regarded as provisional, and it is to be hoped it will soon undergo revision, as neither the position nor the names of the species are always to be considered as satisfactory.

All the Provincial names for the birds used in Devonshire have been given, and also sometimes those employed elsewhere in England, to enable residents in other counties to identify the species. In collecting these names much assistance has been afforded by several friends, a list of whom we have given on page lxxxvii.

An attempt has been made to trace the history of each species

in Devonshire from the earliest records to the present day, and chapter and verse have been nearly always given for any statement not made on the Authors' own responsibility. It may be thought that the particulars relating to some species are too minute, and that more instances of occurrences have been supplied than were necessary; but to naturalists wishing to trace the first appearance or the disappearance of a species, its increase or decrease, or its extension of range to east or west, north or south, it is of little service to simply place words such as "common" or "rare" against its name. Dates, too, are of great importance, and often enable an investigator to trace a wave of migration across the kingdom. In a large county like Devonshire, with so varied a surface, some species are common on one side, though rare on the other, and in one portion appear in winter and in another in summer. Such differences can only be made apparent by carefully recording the dates of occurrence as well as the localities. By such means unlooked-for facts may be brought to light. It should never be forgotten that local catalogues ought to furnish the materials for generalizers to work upon, so that there is every reason to believe that the references which have been given, and which have been carefully verified, will be found useful to students.

Some species, such as the Purple Sandpiper and Black Redstart, are common in the south-western part of Devon, but are rare in the eastern portion. Others, like the Common Redstart, Turtle Dove, and Sanderling, are more frequently met with in Eastern Devon than in the south and west. Again, the Pied Flycatcher, Twite, and Wood-Sandpiper are almost unknown in the south, but are not unfrequent in the north of the county, and some, as the Oyster-catcher and Puffin, are far more plentiful on the north coast than on the south; whilst, on the other hand, Geese, some kinds of Ducks, and Terns appear more frequently on the south coast than in the northern part of Devon. About thirty-four species, mostly accidental wanderers from the Continent of Europe, have occurred in South Devon which have not yet been recorded from North Devon, and eight species, mostly American,—perhaps nine, if we include what was possibly a *Vireo* seen on Lundy,—have been observed in the northern part of the county which have not been procured in the south.

Some species come in flights at more or less distant intervals of time, such as the Crossbill, Sand-Grouse, Quail, Bittern, Snowy Owl, Rough-legged Buzzard, Grey Phalarope, Skuas, &c., their occurrence at other times being rare, so that the Authors think it of much importance that the dates of such events should be carefully recorded in Local Faunas, in order that the route the birds follow may be ascertained.

The difficulties experienced have been due rather to the great abundance of material that has come to hand than to lack of information with regard to most species, and it has often been hard to decide what to reject or what to retain from the mass of observations available in various publications or kindly contributed by friends, and in some instances the Authors had collected forty or fifty references for a single bird.

No bird which has not been actually obtained and examined by competent persons has been admitted in the census of species occurring in the county, with the exception of the Black-headed Warbler, Water-Pipit, and Hawk-Owl, about which the Authors entertained no doubt; perhaps strictly they should have adhered to their rule in these instances as well.

They have considered it advisable to mention in their proper place all birds which have been recorded as occurring in the county, even though they have thought it necessary to exclude them in the enumeration of species, either because they have not been actually obtained, or were incorrectly identified, or were admitted into previous lists upon insufficient evidence; all such species are included in square brackets [].

No doubt it is most desirable to eliminate all birds from the County List that have been added to it upon insufficient evidence; but at the same time it seemed proper that the reasons for so doing should be stated in all cases, otherwise it would be impossible for a student to ascertain whether a species was omitted purposely or through oversight. The Authors have preferred to allow their readers to judge for themselves by citing all the evidence available in these cases.

While they are only too conscious of omissions and possibly of errors which they fear may be detected in their work, and for which they venture to apologize in advance, they yet hope that

their love for their beautiful county, and the long period of forty years during which its "careless, happy birds"* have provided them with a most delightful study, may be looked upon with indulgence as their excuse for placing the results before the Public.

W. S. M. D'URBAN.

April 1892.

MURRAY A. MATHEW.

GEOGRAPHICAL POSITION AND PHYSICAL ASPECT OF DEVON.

DEVONSHIRE has the largest area of any English county excepting Yorkshire and Lincolnshire. Its extreme length from the Start Point on the English Channel to Ilfracombe on the Bristol Channel is about seventy miles, and its average breadth is close upon fifty miles. According to the Registrar-General it contains 1,621,746 acres, or 2534 square miles. It lies between the parallels of 50° 12' and 51° 14' North Latitude, and 3° and 4° 30' West Longitude. Forming the broadest and most central portion of the South-western Peninsula of England, jutting out between the Bristol and English Channels, it is bounded on the east by Somerset and Dorset, and on the west by Cornwall. Like the last-named county it possesses both a North and a South Coast, the former being about 50 miles and the latter about 100 miles in length.

Unlike many other English counties whose boundaries are purely arbitrary, Devonshire is a well-defined and natural district, differing in many respects from any other part of the British Islands, and its Fauna possesses distinctive characteristics which separate it from the counties immediately adjoining it on the east, and in a minor degree from Cornwall on the west, although Cornwall, Devon, and West Somerset are intimately connected and allied in character, and might be advantageously treated of as a whole.

* "κοιφονύων φύλον ὀρνίθων."—SOPHOCLES, 'Antigone,' 343.

The geographical position of the county is not without its effect on the Avifauna, and its coasts receive visitors arriving by several of the great streams of migration from the north, east, and south-east, whilst its proximity to the Continent on the south, and to the Atlantic Ocean on the west, adds some interesting species to the richness of its Fauna. Its diversified surface—bleak, barren moorlands; steep, rugged sea-coasts; sand-hills; extensive muddy tidal estuaries; freshwater “leys”; deep, sheltered “coombes,” and wooded valleys,—offers attractions to birds of varying habits and predilections. The dependent Island of Lundy, off the north coast, with its precipitous sides affords an advantageous breeding-station for some sea-birds which we should not otherwise be able to claim as residents for our county. With so many inducements for migratory species to visit us, it is not surprising that Devonshire can boast of more species of birds than most other English counties, being probably only exceeded by Yorkshire in the number fairly included in its List. Three species—the Black-headed Warbler, the Buff-backed Heron, and the Great Black-headed Gull—have so far never been met with elsewhere in the British Islands, and two out of the three British-killed Rufous Warblers have occurred in Devon. In the opinion of some authorities the only occurrence of the Little Egret in Britain about which there can be no doubt is the specimen killed on the estuary of the Exe in May 1870.

The Western Boundary between Devon and Cornwall is marked by the course of the Tamar for nearly its whole distance. This fine river rises at Wooley Barrows, five miles south of Hartland in North Devon. It supplies the Bude Reservoir and runs out of it, and after a winding course of fifty-nine miles flows into Plymouth Sound by Mount Edgecumbe. In conjunction with its large affluent the Tavy, which rises on the northern part of Dartmoor, and has a course of twenty-three miles, and some small streams and inlets of the sea on the Cornish side, it forms a magnificent estuary, being tidal for seventeen and a half miles from the sea. That portion lying between Saltash, on the Cornish side, and Devonport is termed the Hamoaze. The river Plym, also rising on Dartmoor, forms a lateral estuary called the Laira and Cattewater, and discharges into Plymouth Sound just below the “Hoe.”

The Eastern Boundary between Devon and Somerset is formed by the wild moorlands of Exmoor, on which the Exe and its tributary the Barle take their rise, and after crossing the valley of the Tone, to the eastern escarpment of the Blackdown Hills, which it skirts, to Yarcombe, there meets the boundary line between Somerset and Dorset. From thence to Lyme Regis the county boundary between Devon and Dorset runs over a broken hilly country, becoming more open as it approaches the sea.

The County may be conveniently divided into five well-marked, and more or less natural, districts, as follows:—I. Dartmoor; II. The South Hams; III. East Devon; IV. North Devon (each of the last three abutting on the first); and V. Lundy Island off the north coast.

I. DARTMOOR.

Dartmoor*, the Mother of Streams, occupies a considerable part of the south-west area of Devonshire. From Belstone, near Okehampton, in the north, to the Plymouth road between the rivers Erme and Avon in the south, it extends nearly 22 miles; and from Blackdown to Ilington it stretches 17 miles from east to west. Its average breadth is about ten or twelve miles, and it altogether covers an area of about 275 square miles, or 176,000 statute acres; but a large part of this is taken up by private estates, common ground belonging to various villages, warrens, and "New Takes," where small pieces of the moor have been drained and enclosed, and the balance representing the property of the Duchy of Cornwall is put down at 53,644 acres, which is mostly on the granite and in a state of nature. Viewed from the north, Dartmoor rises like a vast fortress, its numerous 'tors' present the appearance of fortifications; but once its steep sides have been surmounted all resemblance to a mountainous district is lost,—one finds one's self on a great granitic plateau some 1400 feet above the sea-level, where rounded hills of no great height succeed one another like rolling billows; bogs and streams are in their peaty hollows; there are no lofty precipices to suggest to the eye of the lover of birds that he is wandering where once the Eagle

* The name is said to be derived from the British *dwr*, water, and *mor*, a reservoir—as we learn from the Introduction to Carrington's Poem.

may have had its eyrie. Dartmoor is the great watershed of the county. Three of its principal rivers, the Taw, the Teign, and the Dart,—the last two flowing south into the English Channel, and the first northwards and uniting with the Torridge at Appledore,—rise in close proximity near Cranmere Pool. Besides these, the Oke-ment, a tributary of the Torridge, to the north, and the Avon, Erme, Yealm, Plym, and Tavy, all flowing south, with many another minor stream, owe their source to the heavy rains which fall on the elevated moor. It contains the highest land in the county—High Willhayes, 2039 feet, and Yes Tor near it, 2027 feet; while there are several other Tors, which rise from 1700 to 2000 feet, such as Great Mis Tor, 1760 feet, Fur Tor, 1877 feet, &c.

IN the summer-time there is no more delightful district; the elastic air, the hills all purple with heather, the extensive views to be had from the rocky tors of “Devonia’s garden-fields” stretched a fair panorama beneath, the prehistoric barrows, hut circles, ancient stones, and numerous streams here and there crossed by bridges formed of great slabs of granite resting upon boulders,—all lend a romantic charm, so that it is no wonder that Chagford on the east, an old Venville town, which may be regarded as the capital of the Forest, is becoming every year a more frequented resort, and that many a jaded invalid finds health and strength in breathing “the freshness of the moorland gale.” On the principle of “*omne ignotum pro magnifico*” the early ornithologists of the county, with the exception of Col. Montagu, who could never be betrayed into such a mistake, were wont to regard the moor as the nesting-place of Goshawks, Eagles, Grey Plovers, and of most of the Waders to be found on our shores, and Great Bustards were supposed to have their home within its unexplored fastnesses. But Carrington, the poet of the moor, had a truer perception of the almost entire absence of life in its central wastes, when he wrote—

“ . . . nothing that has life

Is visible; no solitary flock
At will wide ranging through the silent moor
Breaks the deep felt monotony; and all
Is motionless, save where the giant shades
Flung by the passing cloud glide slowly o’er
The grey and gloomy wild.”

The ornithologist who is well acquainted with the moor will

perceive at once that it presents no suitable abode for many of the birds which were supposed to frequent it: the Great Bustard, for instance, which has only occurred as a rare straggler on its confines, would find no ground to meet its requirements; the Common Buzzard and, perhaps, the Hen-Harrier, and occasionally Montagu's Harrier, are the largest of the Raptores which may still nest upon the plateau of the forest, with the Snipe, Curlew, and Common Sandpiper, the Ring-Ouzel, the Wild Duck, and perhaps the Teal. Cranmere Pool, situated in a dreary swamp, where the walking, or rather leaping, from one high tussock to another is sufficiently fatiguing on a hot summer's day, has also by its name provided a trap for the unsuspecting ornithologist, who rashly conjectures that it may have once been the haunt of the Crane, *Grus communis*. But, in the first place, the Common Heron in the West Country is called the Crane, and the pool might well be supposed to take its appellation from the common and local bird; and, in the second place, we are assured that the pool in reality has no connection whatever with birds—"Cran" or "Cron" being the British for a stream, and "mere" or "mor" being British for a source of waters*. As a fact, hardly a bird is ever to be seen in the neighbourhood of Cranmere Pool. We well remember one hot day in early autumn, when in company with a keeper, a moor-man, and three noble Gordon setters, we started off in search of a brood of Blackgame reported as frequenting a hillside near the pool. We had some difficulty in discovering our point, as even the most experienced moor-men are sometimes at a loss to find Cranmere, and as we approached its dreary morasses birds became scarcer; by the bog which represented the pool, long since drained, there was a solitary Heron, and some young Ring-Ouzels were the only other birds we saw.

Dartmoor is the home of mists, which, even in the summer-time, will suddenly pour their white fleecy waves over the rounded hill-tops, blotting out all the landscape, and in late autumn and winter are of such constant occurrence that it is not wise to wander on the moor without a compass, or one might be easily lost and compelled to spend a night among the bogs. It was our lot to be enveloped in a thick fog one November afternoon when

* *Vide* Introduction to Carrington's 'Dartmoor.'

Snipe-shooting; rain came on at the same time—such rain as can only be experienced on the moor—and, being without a compass, we were in great perplexity, wandering on, quite lost as to our direction, until we luckily came across a little running stream which brought us out on the high road near Post Bridge, from whence we managed to find our way back to Chagford, which we reached late at night.

We must not omit to add that numerous bogs and mires, and extensive beds of peat, sometimes 13 feet in depth, form peculiar features of the Dartmoor country. Some of the mires are not safe to walk across, as the unwary might sink in and find extrication difficult. All patches which present a bright green surface should be especially avoided, as the brilliant colour is a sure index of a treacherous peat-hole concealed beneath. At one time we were attended on the moor by a keeper fresh from a dry district in Norfolk, and great used to be his dread of venturing far on the quaggy surface of Raybarrow Mire! Indeed he took no pleasure in any part of the moor. Signs of the long-continued action of water meet the wanderer in the forest on every side—not only in the bogs and mires, and in the numerous streams which issue from them, but in the narrow fissures in the hollows between the rounded hills, worn many feet deep by the constant erosion of tiny runnels; in stepping across one of these the horns of some unfortunate bullock may be detected far below, the gap having been just wide enough for the beast to slip through, and once in all escape has been impossible. The Dartmoor ponies have a reputation for great sagacity in recognizing dangerous ground, and some we have tested in this particular could never be induced to advance far upon a mire; but they are not all equally clever. One day when we were shooting Snipe we were joined by a friend who was mounted on a good-looking cob, and when we questioned him as to the cob's willingness to venture on boggy ground, we were assured that the animal was "very safe"; but the words had hardly been uttered when it deliberately stepped into the midst of a verdant patch, sinking up to the girths in the liquid mud!

The name of "Forest" (which signifies a "chase" or tract of country set apart for game) might lead some people to expect that

there would be trees upon the Dartmoor plateau; but there are none beyond the grove of stunted old-world oaks known as Wistman's Wood, and tree-frequenting birds are consequently absent; the hill-sides are bleak and bare, strewn in places with great blocks of granite, and the only shelter afforded the sportsman who may be caught by a sudden tempest is offered by the noble clumps of Flowering Fern (*Osmunda regalis*) which grow in some of the hollows. So cold and desolate is the whole district of the Forest, so little bird-food can be procured from its peaty swamps, that it is not surprising that birds give it a wide berth, and pass beneath it either on its northern or southern side. Our conclusion is that Dartmoor, wild and extensive as it is, as a bird-haunt possesses but little interest. Nevertheless, it plays an important part with respect to our Devon Ornithology as a distributor of migrating birds. Rising like a barrier on the south-west of the county, it presents its bleak heights to the flights approaching from the south-east on their way to the north-west. It is well known that birds on their migrations shun any opposing highlands, and thus the advancing streams of birds deflected from the Dartmoor ranges turn south-west, and scatter over the warm and sunny South Hams, and along the numerous sheltered estuaries running in from the English Channel.

In like manner birds approaching from the north and north-east are diverted, and taking a more westerly course follow the Tamar Valley to Plymouth Sound, and become dispersed on the south Cornish coast and over the Land's End district; or coming down the Exe valley sweep round Dartmoor to the South Hams. The absence in North Devon of stragglers from the south of Europe, which have frequently occurred in the south of the county, and the greater number of American species which have been obtained in North Devon and in the South-west of Cornwall are due to the influences exerted by Dartmoor upon the course of migrating birds.

In October large flocks of Fieldfares frequent the edges of the Moor, and, as setters will always own their scent, are wont to irritate the Snipe-shooter, and in the autumn Land-Rails are sometimes numerous around the bogs. In the winter a few small trips of Golden Plover may be found on the hill-tops. The sportsman who, duly furnished with a Duchy licence, rambles

over the Forest will get plenty of healthy exercise, but, however good a shot he may be, will hardly make a heavy bag. Five or six couple of Snipe, a brace of birds dropped from an unexpected covey, a chance Woodcock, with a Wild Duck or Teal, used to make what we considered a good reward for a long round in the direction of Cosdon Beacon, and we ever found more Snipe on the edges of the moor than on the central bogs. The few Blackgame we encountered were too wary to suffer approach, and in ten years' rambling over the northern and eastern portions of the Moor a single specimen of the Solitary Snipe, shot in a gale on Scorhill Down, was the only rare bird which fell to our gun. The uncertainty of the sport provided by the Moor is well exemplified by a clever etching of a Snipe which we saw some years ago in the visitors' book of the Three Crowns Hotel at Chagford, beneath which were the following lines :—

“ Four ardent sportsmen came to beat the Moor ;
 The Moor beat them, with wind and constant rain ;
 Four days they braved it, but it blew the more ;
 Their sport shall thus immortalized remain.

[Here is an etched Snipe.]

“ 'Tis he ! 'Tis he ! methinks I see him still :
 We found him at a streamlet's mossy head :
 He rose ; four guns pour'd echoing o'er the hill
 Their deadly shower ; what wonder he fell dead ? ”

However, Snipe are stated to be more plentiful on the south-west side of the Moor, near Horrabridge.

II. THE SOUTH HAMS.

This favoured district, the “ Garden of Devon,” offers a marked contrast to Dartmoor. It is included between the estuary of the Teign on the east, the Tamar on the west, Dartmoor on the north, and the English Channel on the south. It is penetrated by the estuaries of the Teign, Dart, Avon, Erme, Yealm, Plym, Tavy, and Tamar, and the long arm of the sea extending to Kingsbridge. Along the coast are the curious freshwater “ Leas ” or “ Leys ” at Slapton, Torcross, Thurlestone, Milton, and Huish. These are

small sheets of water lying close to the sea, abounding with birds, and in winter are visited by large flights of wild-fowl. Some of them have been drained and only occasionally contain water.

A fine view of the whole of this district may be obtained from the top of Brent Hill, on the southern border of Dartmoor. Looking towards the sea the South Hams are spread out at our feet. We see a well-cultivated fertile country divided into fields, surrounded by leafy hedgerows, and diversified with woods and plantations. Its surface is cut into deep "coombes" or valleys by numerous small rivers taking their rise on Dartmoor, and making their way to the English Channel, whilst the southern portion is scooped out by Torbay, and deeply penetrated by estuaries and arms of the sea at Dartmouth, Kingsbridge, and Plymouth, whose muddy shores and sand-banks abound with Waders, especially in autumn.

The most southerly part between the Start Point and Bolt Tail juts out into the Channel in a sort of promontory, and being but 80 miles north-west of the nearest part of the French coast, Cape de la Hague, is often visited by rare birds, and receives the earliest migrants in spring. At Start Point is the well-known Lighthouse, a station of the British Association Migration Committee.

Except in a few spots the coast is rocky, and the precipitous cliffs of the Silurian and Devonian formations are breeding-places for many birds, as the Martin, Raven, Jackdaw, Swift, Stock-Dove, Rock-Dove (?), Peregrine, Cormorant, Shag, and Herring-Gull, and perhaps the Lesser Black-backed Gull and a few Guillemots and Razorbills.

Three large bays indent the coast-line, viz., Torbay, between Hope's Nose and Berry Head; Start Bay, between Froward Point (Dartmouth) and Start Point; and Bigbury Bay, between the Bolt Tail and Stoke Point. These bays are frequently visited in autumn by large numbers of Scoters, Terns, Gulls, Skuas, Divers, and Grebes.

In the country between Dartmouth and Plymouth the climate is about the mildest that can be enjoyed anywhere in the British Islands, the mean annual temperature being $51\frac{1}{2}^{\circ}$, and, near the coast, oranges, lemons, and American aloes flourish and bloom in the open air, and delicate exotics, such as pelargoniums, myrtles,

gum-trees, fuchsias, &c., stand out all the winter with little or no protection. Until very recently the railroad did little more than skirt the northern and eastern boundaries, so that the district has been hitherto retired and secluded. It is not surprising that a country offering such varied attractions for bird-life should be visited by many rare species seldom met with elsewhere, and that commoner species should abound. Consequently Ornithologists have flourished in this district ever since Ornithology became a pursuit and the art of Taxidermy was improved. Collections of mounted birds are (or were) very numerous, nearly every country house possessing one more or less extensive. The district has been better worked than almost any other part of Devon, and in few parts of England has Ornithology been pursued with more vigour and success. At the end of the last and beginning of the present century, Col. Montagu resided at Kingsbridge in the midst of this Ornithological Paradise, and has rendered it classic ground by the important observations on the habits of birds which he made there. He first discovered the Cirl Bunting in the winter of 1800 and found its nest and young in the following summer. In 1802 he demonstrated the specific differences of Montagu's Harrier, and in 1805 he confirmed the identity of the Ringtail and Hen-Harrier. In 1806 he discovered the nest and eggs of the Dartford Warbler. He also first discovered the Wood-Sandpiper as a British bird, having obtained one killed on the south coast of Devon, although but two other specimens are known to have occurred there since his time; and recorded the first British-killed specimen of the Red-breasted Snipe, which was shot on the coast about 1801, and of the Buff-backed Heron (or 'Little White Heron') shot at South Allington in Oct. 1805. The latter is the only undoubted example of the species which has been killed in Britain. The specimen is preserved in the South Kensington Museum of Natural History.

The exertions of many other ornithologists have made the feathered inhabitants of this part of the county thoroughly well known. For many years the late Mr. J. Gatcombe resided at Plymouth and contributed largely to our knowledge of Devonshire Birds; and Dr. Edward Moore, the Revs. Kerr Vaughan, R. Holdsworth, C. Bulteel, and R. A. Julian, and Mr. J. Elliot, deceased, and Messrs. J. Brooking Rowe, Henry and R. P. Nicholls, and Edmund A. S. Elliot, now living, have each and all helped to build

up the mass of facts which it has been our self-imposed task to investigate and apply to the uses of the present work.

The extreme mildness of the winters tempts some of the summer migrants to remain very late in the year. The Chiffchaff and Blackcap have often been observed in the winter months. In the extraordinary mild month of January 1776 the Cuckoo was heard in several parts of the district. In fine hot summers many southern species are induced to cross the channel, as the Hoopoe, Bee-eater, Roller, and Little Bittern. Two out of the three British-killed specimens of the Rufous Warbler were shot on the coast.

This district forms the head-quarters of the Black Redstart in winter. All along the coast from Teignmouth to Plymouth it is frequently met with. It is remarkable that the Common Redstart should be rarely seen in summer and only occasionally in spring and autumn. The Hawfinch, Crossbill, and Oyster-catcher have bred within its limits. At Plymouth have occurred the following rare species:—Blue-headed Wagtail, Richard's Pipit, Water-Pipit, Alpine Accentor, Fire-crest, Golden Oriole, Roller, Woodchat, Lesser Grey Shrike, Hoopoe, Red-footed Falcon, Purple Heron, American Bittern, Black Stork, Spoonbill, Red-necked Phalarope, Eider Duck, Kentish Plover, Gull-billed Tern, Whiskered Tern, Little Crake, Great Skua, Sooty Shearwater, Black Guillemot, &c.

The Kingsbridge district has produced a great number of interesting species, amongst which may be mentioned Nightingale, Dartford Warbler, Grasshopper Warbler, Blue-headed Wagtail, Golden Oriole, Great Grey Shrike, Waxwing, Tree-Sparrow, Crossbill, Rose-coloured Pastor, Chough, Wryneck, Bee-eater, Hoopoe, White-tailed Eagle, Kite, Little Bittern, Night-Heron (9 specimens), Squacco Heron, Buff-backed Heron, Spoonbill, Glossy Ibis, Pink-footed Goose (?), Bewick's Swan, American Green-winged Teal, Velvet Scoter, Little Crake, Crane, Little Bustard, Dotterel, Grey Plover, Avocet, Red-breasted Snipe, Spotted Redshank, Black-throated Diver, Fulmar, Buffon's Skua, and Sabine's Gull.

SLAPTON LEY.

This sheet of fresh water, running parallel to the sea and only separated from it by a bank of sand and shingle some two hundred yards wide, is situated in the centre of an indentation

of the coast between Froward Point, at the entrance of Dartmouth Harbour, on the east, and Start Point on the west, which forms Start Bay. The Ley or Lake is long and narrow in shape and is about three hundred acres in extent, stretching for more than two miles along the coast. It is formed by the junction of three small rivers or streams flowing from the neighbouring valleys, their waters being dammed up by the shingle-bank or ridge of small stones and sand thrown up by the heavy waves breaking on the low coast. The fresh water having no outlet, except by percolation through the beach, forms a lake of varying dimensions, according to the amount of rainfall, being sometimes very full of water and at others almost dry in parts. About the centre it is crossed by a stone bridge leading to the small village of Slapton, and dividing it into two portions, the lower or western and the upper or eastern. The former is considerably the deepest, the latter being nearly filled up with dense beds of reeds, where most of the Coots breed. In the lower part there are also many beds of reeds and club-rushes, forming a fine cover for the numerous aquatic birds, which find a congenial resort here, as the Ley is strictly preserved. The water is well stocked with Pike, Perch, Rudd, and Eels, all of which reach a large size. On some occasions in violent storms the sea has effected a breach through the shingle-bank and the salt-water obtaining access to the Ley has killed the fish in it. The action of the waves and there being no outlet for the pebbles to escape either to the east or west, soon fills up any temporary gap which may be formed. The Ley is a great stronghold for the Coots, which breed here in vast numbers, but are largely reinforced in autumn and winter by "foreigners," and numerous kinds of Ducks. At the western extremity is situated the small fishing-village of Torcross. Here the sea is so deep that pleasure steamers can run their bows on to the steep beach and land passengers by means of a gangway let down. About the middle of the Long Sand, as the ridge separating the Ley from the sea is termed, stands the 'Sands Hotel,' much frequented by sportsmen in the fishing-season, and at the eastern end is Strete, the residence of Mr. H. L. Toll. The Dartmouth turnpike-road traverses the whole length of the Long Sand, and a coach passes along it between Dartmouth and Kingsbridge daily, but otherwise there is not much traffic to disturb the Wild-fowl. Formerly an annual Public Shoot took place in the winter, but of late years none was allowed until January

1891, when Mr. Lucas, who now rents the shooting from Sir Lydston Newman, wishing to thin the number of Coots which had accumulated, organized a large shooting-party, when 1700 Coots were slaughtered, as will be found more fully recounted in our account of the Coot. Amongst the rare birds that have occurred on and around the Ley may be mentioned the Crested Lark, Honey-Buzzard, Bean-Goose, Gadwall, White-eyed Duck, Black-winged Stilt, Black-throated Diver, &c.

SLAPTON LEY is the most important and largest sheet of fresh water on the coast, but there are some others known as Leys, viz.:—

TORCROSS LEY, an artificial piece of water made by Mr. A. F. Holdsworth, J.P., C.C., of Widdicombe, about 1878. It is about thirty acres in extent and is kept in by a sea-wall. It is close to the village of Beesands and contains fish. It is sometimes visited by Wild-fowl.

THURLESTONE LEY is on the Thurlestone part of the Brunskill estate, and is more of a marsh than a lake, having been drained. It covers about twelve acres.

MILTON or HORSWELL LEY is only a lake when the equinoctial gales dam back the water by a barrier of sand; then the fresh water collects and a fine sheet of water is formed for a short time, until the accumulated weight of it breaks down the barrier and the Ley is drained into a foul-smelling marsh.

HUISH LEY by recent successful drainage is now converted into a marsh and is a favourite nesting-place for the Lapwing.

III. EAST DEVON.

Under this title we include all that part of the county lying between the Teign Valley and the watershed formed by the moorlands of Morchard Bishop, Washford Pyne, Rackenford, and so on to Anstey Head on the west, and Somerset and Dorset on the north and east; and all that part which on the south from Teignmouth to Lyme Regis borders on the English Channel. This eastern division of the county is traversed by several ranges of low hills, running for the most part in a north and south direction, such as the Haldons (800 ft.), Woodbury and Ottery East Hills; and the north-eastern portion is occupied by the mass of the Blackdown Hills. The coast-line is indented by the estuaries of the Teign and Exe and the smaller ones of the Otter and Axe, and the

district contains the fertile vales of Exeter and Honiton. The cliffs of the sea-coast, in some places of considerable height, are formed by the red rocks of the Triassic, and the white chalk, the clays and sands of the Cretaceous Periods, and form breeding-places for Kestrels, Herring-Gulls, and Cormorants, and a few pairs of Ravens and Peregrines. The Osprey and Gannet no longer breed on the south coast, although the latter is supposed to have done so in an isolated instance a little more than thirty years ago.

At the mouth of the Exe on the south-western side is a stretch of sand-hills known as Dawlish, Kenton, or Exmouth Warren, which in the middle of the last century covered about 300 acres, but is now much diminished in size and is decreasing annually. It was formerly a favourite place of resort for aquatic birds, and here the Black-winged Stilt, Pratincole, and Red-breasted Goose are reported to have been met with. The Avocet appears to have once frequented it not uncommonly, and the Dotterel and Little Stint occur occasionally. A pair of Sheldrakes have bred there of late years, and the Ring-Plover frequently nests on its shores. The only known British specimen of the Great Black-headed Gull was shot in the Exe estuary off Exmouth in May or June 1859, and amongst the rocks near the mouth of the Exe a specimen of the American White-winged Crossbill was picked up dead. We believe we were once fortunate enough to see a Black-headed Warbler in our garden at Exmouth, and the only known Devonshire examples of the 'Parrot Crossbill' were shot at Marley, near that town, in January 1888; recently a specimen of the Serin has been caught in the neighbourhood. The Little Auk, Wilson's Petrel, Buffon's Skua, &c. have also occurred.

Higher up the Exe estuary near Topsham, a splendid adult Little Egret was shot in May 1870, and an example of the Fulmar was captured. The Osprey has frequently occurred, the last being killed in 1871. In the marshes opposite Topsham the Bearded Tit is said to have formerly bred. One or two specimens of the White Stork have been obtained, and the Black Stork is believed to have been seen. Around Exeter the Nightingale and Grasshopper Warbler are of frequent occurrence in spring and summer, and the Blue-throat is reported to have occurred on one or two occasions.

The mud-banks and marshes of the Exe and the Clyst were once a great resort for Wild-fowl, and afforded good sport to gunners, but are now rarely visited by Ducks and Geese, except in severe winters, and even then their numbers cannot be compared to what were seen in former days before the introduction of punt-guns and the construction of the railways on either side of the river had banished the Coots from its waters.

Between Topsham and Exmouth are extensive mud-flats, bare at low water. They become more sandy near Starcross and towards the mouth of the Exe; but just below Topsham the mud is very soft and tenacious, of a deep black colour under the surface, and exhaling most unpleasant odours, consisting as it does, in great measure, of the sewage brought down from the City of Exeter and the towns above. Although more mud is carried down during the winter season than in summer, yet the surface is firmer at the former period, because the high winds and storms press it down and consolidate it. In some spots there are deep holes and soft places which are rather dangerous, and we have several times had difficulty in extricating ourselves, having sunk into them when too eagerly pursuing shore-birds. It is related of an officer of the Royal Artillery, who was staying at Exmouth, that wishing to enjoy a morning's sport, shooting on the mud near Lympstone, he provided himself with "mud-pattens" (pieces of board strapped to his feet) in order to prevent himself from sinking in the mud. Unfortunately, after he had proceeded a considerable distance from the shore, he staggered and crossed his feet, and to his chagrin found himself unable to move. Notwithstanding all his efforts to attract attention, he was not observed until the rising tide had reached halfway up his body, when a boat put off and he was rescued from his unpleasant position. Formerly vast flocks of Ring-Plovers, Dunlins, Sanderlings, Knots, Godwits, Curlew, and Whimbrel, with occasionally some Curlew Sandpipers, Redshanks, Greenshanks, and Turnstones, used to be seen on these mud-flats, especially in autumn and spring. Even now enormous flocks of Lapwings, Golden Plover, and Dunlins visit them at times during the winter months, but are shy and difficult to approach. The Black-tailed Godwit and Spotted Redshank have occurred.

The Otter, which rises in the Blackdown Hills just over the border

of Somerset, flows into the sea at Budleigh Salterton. The marshes near the mouth of this little river were formerly famous for the great quantity of Wild-fowl which frequented them, attracted by the warm springs of Tidwell that always remained unfrozen in severe weather. A Glossy Ibis was shot here in September 1866.

At Bieton, the seat of the Rolle family, not far from Budleigh, is an artificial sheet of water, at one time stocked with large numbers of Egyptian Geese, Black Swans, and Ducks of various species, few of which are now left.

Ladram Bay, between Budleigh Salterton and Sidmouth, is a great breeding-place for Herring-Gulls and Cormorants.

The white cliffs at Beer, where freestone has been so extensively quarried for many centuries, afford a home for large numbers of Pigeons, but of what species is uncertain, though it is probable they are derived from the domestic "Blue Rock." They breed in the extensive galleries which have been worked in the soft white stone.

Further east, near the borders of Devon and Dorset, are the wonderful landslips of Bindon and Dowlands. Here are found Stock-Doves breeding, and unusual numbers of Green Woodpeckers. In autumn large flights of Woodcocks arrive on moonlight nights, but do not remain long.

Inland on the high ground between Axminster and Lyme Regis Blackgame used to be found plentifully, and some are still left on the Blackdown Hills.

IV. NORTH DEVON.

The political boundaries of this district are quite arbitrary. It may be considered more naturally as comprising the basins of the Taw and Torridge. As thus restricted it occupies about a third of the total area of the county, and may be roughly defined by the following boundaries:—On the west the high land bordering the valley of the Tamar, and forming the natural water-shed between streams flowing south to the English Channel and those emptying themselves into the Bristol Channel. On the south-west and south, Dartmoor; on the south-east and east the water-shed separating the sources of the Teign and the Creedy from those of the North-Devon Rivers, from Cosdon Beacon by Spreyton,

between Copplestone and Crediton, by Puddington and Rackenford Moor to Anstey Hill on the border of Somerset; on the north-east, Exmoor; and on the north and north-west the Bristol Channel.

This tract of country is principally occupied by the culm-measures of the Carboniferous formation, producing a heavy clay soil, most congenial to the growth of the oak, but in the north-eastern corner the Upper Devonian rocks are much developed. A line of hills stretches from Morte Point to Exmoor on the north-east, whilst on the west another line reaches from Hartland Point to Dartmoor. Between these two ranges lies a basin of cultivated land watered by the Taw and the Torridge, presenting a marked contrast to the wild uncultivated tracts of Exmoor and Dartmoor on the north-east and south-west of it. The rock-bound coast bordering the Bristol Channel is rugged and precipitous, and exposed to the full force of the winter storms from the north-west. It is only indented by Barnstaple or Bideford Bay and the estuary of the Taw and Torridge.

The number of species of birds recorded from this portion of the county is not quite so large as of those that have been met with in the south. About 34 species have been obtained in the rest of the county which have not yet been detected in the northern portion. On the other hand, eight or nine birds have occurred there which have not been observed in the south, and a few species are more numerous in the north than in the south of the county.

THE ESTUARIES OF THE TAW AND THE TORRIDGE.

These two rivers unite at Appledore before joining the Bristol Channel, and their combined estuaries form the only break in the rocky coast, inviting migratory birds from the east and north passing down the Bristol and St. George's Channels to enter the northern portion of the county. It is the district about Barnstaple that has been the best worked in North Devon, as many excellent ornithologists have collected here, and have recorded such species as they met with in the 'Zoologist' and other publications. In the 'Zoologist' for 1857 (p. 5345) we wrote as follows:—"The situation of Barnstaple, and the country round it, is one peculiarly fitted to attract any birds which may be straggling westwards. We

have a most diversified country : hills, fallow-lands, dry heaths, elevated moors, extensive rushy marshes, and where the Taw below Barnstaple flows broad and tidal, previous to its uniting with the Torridge at Appledore and joining the Bristol Channel, we have broad sandy flats, which are left dry as the tide retreats, and here and there soft beds of ooze formed from the alluvial deposit which the Taw has rolled down through many a fertile meadow on its way from the wilds of Dartmoor. And when the two rivers meet there is a large tract of dry and barren sand-hills bordered landwards by an extensive fenny flat called the Braunton Marshes. Above Barnstaple again there are the Tawton Marshes.”

Some sixteen years after we wrote this descriptive sketch, Mr. G. F. Mathew, R.N. (Zool. 1872, p. 2917), stated that the oozes of the Taw, once frequented by vast flocks of Ringed Plovers, Dunlins, Curlew, and Turnstones, &c., were nearly deserted, and the large autumnal flights of Bar-tailed Godwits, Knots, Curlew Sandpipers, &c. had almost ceased to visit this once famous river. Owing to the railways, embankments, and draining-operations, hundreds of acres of salt-marsh had been reclaimed. Both Taw and Torridge have now railways skirting their banks, and the passing trains scare away the birds as soon as they arrive.

The estuary between Barnstaple and the sea has afforded some interesting birds: Dotterel, Black-tailed Godwit (2 specimens only), Bonaparte's Sandpiper, Wood-Sandpiper, Spotted Redshank, Avocet, Fulmar Petrel, Eared and Slavonian Grebes, and all the Skuas. Near Barnstaple the Golden Oriole has been known to breed, a pair frequenting the grounds of Pilton Abbey during one season. The Pied Flycatcher is also believed to have bred in the neighbourhood, and it seems probable that a brood of Night-Herons was actually hatched out in 1869 near New Bridge on the Taw. Large flocks of Oyster-catchers frequent the mussel-beds near the lighthouse on Braunton Burrows in the autumn and winter.

THE BRAUNTON BURROWS.

The Braunton Burrows are an extensive tract of sand-hills at the mouth of the Taw and Torridge estuary, consisting of some 3000 acres, bounded to the north by Saunton Down End,

to the west by Barnstaple Bay, to the east by Braunton Marsh, and to the south by the river Taw. They abound in rabbits, which feed in the grassy plains between the sand-hills. Some of these plains are dotted over by tall clumps of *Juncus acutus*, and after heavy rains in the autumn and winter become shallow lagoons frequented by Snipe and Wild-fowl. Not being very accessible, and being also well looked after by the lessee of the rabbit-warren, the Burrows offer a sanctuary to many birds, and many rare stragglers doubtless visit them without being noted. During the years in which we were acquainted with this interesting country, the Crested Lark, Richard's Pipit, the Cream-coloured Courser, Temminck's Stint, and the Little Crake were all observed there; while on the Braunton Marsh close adjoining a beautiful adult Squacco Heron and two Pectoral Sandpipers were also obtained, which are all in our collection. Many strange plants are found on the Burrows, where we have come across herbalists searching for them, and some years ago the rare Spurge Hawk Moth (*Deilephila euphorbiæ*) used to be plentiful, but is now extinct, its larvæ, it is supposed, having all been buried beneath the shifting sands. Buzzards, locally known as Black Kites, were once common on the Burrows, attracted by the young rabbits; and Hen-Harriers and Peregrine Falcons were often to be seen. Short-eared Owls in the autumn and winter are to be found there and are sometimes numerous. We one day flushed twenty or more from one small hillock which rose out of the flooded ground like an island, the Owls, slowly sailing round us, settling again among the rushes on neighbouring mounds. One we nearly trod on rose from a freshly killed Peewit, whose head, the part always first devoured by Owls and Hawks, had been torn off and eaten. The Braunton Burrows are the only locality in Devonshire where we have ever met with the Norfolk Plover, sometimes seeing it there when Snipe-shooting in the winter, and one shot by Mr. G. Mathias, of Ilfracombe, is the only North Devon specimen we have handled. In the winter large flocks of White-fronted Geese are seen flying over the Burrows, while in October the sands near Saunton Down End are sometimes black with Wiggon.

The only house within the confines of the Burrows is the tall

white lighthouse erected at its south-west corner to guide vessels entering the Taw and Torridge over the dangerous bar, a red ball hoisted on the top of a flagstaff being the sign that there is a sufficient depth of water for the ships to cross it. Good flight-shooting at Duck may sometimes be had in the winter by the shallow ponds on the Burrows. When the ground is covered by snow, many Woodcocks resort to the neighbourhood of the sea; and we have known good bags to be made at such times on the Burrows—twenty couple a day. On the opposite side of the water, to the south-west, is another extensive marshy flat, bounded towards the sea by sand-hills and the well-known Pebble-ridge. This is the Northam Burrows, once a favourite locality for Snipe, Plover, and Duck, but no longer resorted to by birds, since the villas and terraces of Westward Ho! have sprung up on one side of it, and numerous golfers daily pursue their favourite game among the sand-hills. Here, in former days, we have shot the Ruff; and once, at the middle of April, found a great congregation of Jack Snipe assembled previous to their departure for the north; and here our friend the Rev. Marcus Rickards came across a little flock of White Wagtails on their arrival in the spring, and on September 15th, 1875, shot a very pretty example of the Grey Phalarope still partly in the summer plumage.

THE CLIFFS OF THE COAST.

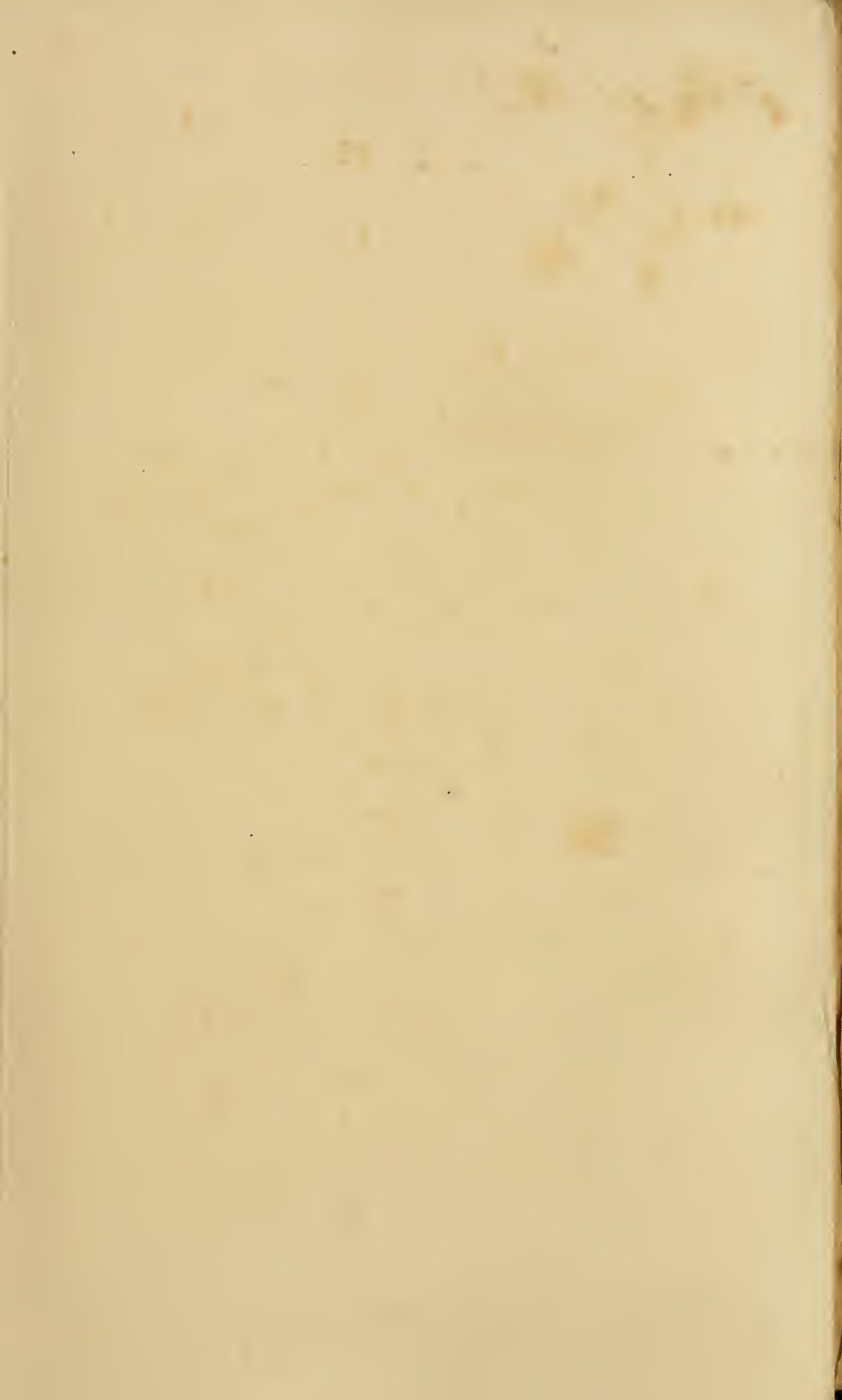
The iron-bound coast of North Devon is of a sterner character than that of the South of the county, fronting the Bristol Channel with a line of precipices, at whose bases there is here and there but a scanty patch of shingle, with deep water close in shore; so that, as the great merchant steamers pass up and down, they approach in calm weather so near to land that from the Tors at Ilfracombe it often seems as if it were possible to throw a penny upon their decks. Countesbury Hill, above Lynmouth, looks down upon the water from an elevation of 873 feet, and the land rises rapidly from the coast, reaching near Paracombe to 989 feet; while, at a short distance, the Chapman Barrows attain to 1572 feet above the sea-level. Anyone who takes the delightful walk from Ilfracombe to Lynton along the cliffs, and then continues his route to Minehead,

will see but few stretches of sand or ooze beneath him to attract shore-birds—only a few Gulls, a pair or two of Kestrels, and perchance of Peregrines; numerous Jackdaws; and, if he is lucky, a Chough or two, some Rock-Doves, and even a Buzzard may be encountered. The waters of the “Yellow Sea” do not begin to get clear until one has reached Minchhead coming from the east, but off Ilfracombe the Channel has attained the green tints of ocean. Westwards from Ilfracombe there are the extensive Woolacombe sands, Croyde Bay, and a fine stretch of sand along the shore of Barnstaple Bay bounding the Braunton Burrows, after we have turned Baggly Point, a famous bird-station; then comes the Bar at the entrance to the united estuaries of Taw and Torridge; and on its western side we have the Pebble-ridge guarding the extensive flat known as the Northam Burrows from the Atlantic rollers. After this the coast is again bounded by lofty cliffs, and passing romantic and beautiful Clovelly, and following round Hartland Point, we soon come to “the sounding shores of Bude and Boss,” and to the black precipices of the North Cornwall coast, which, trending south to the Land’s End, are here and there indented with some sandy “porth” edged with the white margins of the breaking waves. But, like the North Devon coast, these Cornish shores have no abundance of bird-life. It is only when we reach the warm and sheltered bays extending from Penzance eastwards along the south coasts of Cornwall, Devon, and Dorset to Poole Harbour, that we can realize the multitudes of sea-fowl which, at almost all seasons of the year, keep their sun-lit waters “shadowed by their wings.”

V. LUNDY ISLAND.

Lundy, the Isle of Puffins, distant about fourteen miles from Hartland Point, lies well out in the entrance of the Bristol Channel, and being much nearer to Devonshire than it is to South Wales (30 miles) may be justly regarded as pertaining to that county, although according to Drayton, in his ‘Polyolbion,’ there was in old times a controversy between Wales, Devonshire, and Cornwall as to which had the best claim to it. Strange to say, Mr. T. V. Wollaston found that the *Coleoptera* (Beetles) of the

island were quite dissimilar from those of the north coast of Devon and Cornwall, but were very like those of the south coast of Wales. The island lies N.N.W. by S.S.E., contains about 1200 acres, is nearly three miles long by a mile broad, and consisting almost entirely of granite, rises from 300 to 500 feet out of the sea. It is most interesting to the antiquarian, the botanist, the artist, and, not least, to the ornithologist. The last night, from its position, expect it to prove a second Heligoland; its tall lighthouse, casting its rays far over the waters, must certainly attract many a passing migrant. But the American Yellow-billed Cuckoo, picked up dead on the ground beneath, is the only rare straggler recorded as procured through the influence of the light. Mr. J. R. Chanter, of Fort Hill, Barnstaple, in 1875, communicated to the Devonshire Association an excellent account of Lundy Island, in which its history and antiquities are fully described. At the end of his pamphlet he also gives lists of the birds, plants, &c. to be met with. In bygone years the island maintained a larger population than it does to-day: moss-covered mounds mark the site of old cottages, some of these ruins still bearing the names of their former tenants, and are remarkable as providing the botanist with examples of old-fashioned plants no longer in general cultivation; while, in the winter-time, the sportsman will find that Woodcocks seek them for shelter. The top of the island, where not cultivated, is a bare plateau: stunted heath, furze, grass, and rush form the only cover; the slopes towards the sea, known as the "sidlings," are strewn with masses of granite cropping up through the fern, some of the weather-worn blocks taking fantastic forms—one in particular, from its resemblance to a helmeted warrior, is called the Templar; and, following the coast-line, scenes of picturesque beauty are continually presented—the wild rocks, with the surges beating against them far below; the numerous races, where the tide rushes like a mill-stream between the small islands off the north end; the far blue of the horizon; the countless cliff-birds if it be the summer-time; and the mingled colours of the wild flowers will furnish the artist with many a delightful theme. Some water-colour drawings of Lundy, which are hanging at the present time in the billiard-room of a mansion in South Kensington by Mr. Albert Goodwin, are "joys for ever." At the





THE BIRDS AT LUNDY.

From a Painting by John G. Naish of Iffracombe.

south-west of the island are the Gull Rock and the Shutter Rock, the last well known to the readers of Charles Kingsley's 'Westward Ho!' as the spot where the Great Galleon, so long pursued by Sir Amyas Leigh, was wrecked, and sank to the bottom with all hands. The scene in which Sir Amyas, struck blind by the lightning in the great storm, is led to the top of the island in order that he may stand above and face the spot where his long-sought vengeance had been wrested from him by a higher power, presents a description of Lundy by a master hand: "So on they went to the point where the Cyclopean wall of granite cliff which forms the western side of Lundy ends sheer in a precipice of some three hundred feet, topped by a pile of snow-white rock bespangled with golden lichens. As they approached, a Raven, who sat upon the topmost stone, black against the bright blue sky, flapped lazily away, and sank down the abyss of the cliff, as if he scented the corpses underneath the surge. Below them, from the Gull Rock, rose a thousand birds, and filled the air with sound; the Choughs cackled; the Hacklets* wailed; the Great Black-backs laughed querulous defiance at the intruders, and a single Falcon with an angry bark dashed out from beneath their feet, and hung poised high aloft, watching the sea-fowl which swung slowly round and round below" ('Westward Ho!,' chapter xxxii.).

Through the kindness of Mr. John G. Naish, of Ilfracombe, we are enabled to give a photograph of his oil painting of "The Birds at Lundy." The scene is at the north-west end of the island; the small island in the picture is the "Seals' Rock."

There are traditions that the White-tailed Eagle once nested on the cliffs of Lundy, and the Osprey has had an eyrie there later than 1835. The famous white-chested race of Lundy Peregrines hold a precarious tenure of their ancient fastness, and have been once or twice all but exterminated. In the month of September, at the time of passage, numerous Quail and Land-Rails used occasionally to drop on the island for a few days, affording excellent bags. In the spring the beautiful Rose-coloured Pastor was once a frequent visitor, and the Rev. H. G. Heaven was wont to declare that he was almost sure to meet with it if he went out to look for it, and at the request of his friend the late Dr. Woodforde, of

* The Kittiwakes.

Taunton, shot a pair, which are now, with the rest of that gentleman's collection, in the Museum at Taunton Castle. Mr. S. De B. Heaven was so fortunate as to obtain in the autumn of 1858 a fine example of the rare Buff-breasted Sandpiper, which is still to be seen in the same collection. Should the winter be severe, great flights of Woodcock and Snipe were in former days attracted to the island by its numerous open springs and sheltered coombes; but of recent years very few have been seen, for Lundy, like many another once favourite locality, has shared in the disasters which modern progress has entailed upon the homes of those members of the feathered race which only resort to wild and lonely spots. The island, once quiet and seldom disturbed, has of late years been constantly trampled over by quarrymen and others; the greater part of it is now under cultivation; it has been discovered by the summer tourists, who come from Bideford and Ilfracombe in cheap excursion steamers, and harry the cliff-birds and rob their nests. There need, then, be no surprise that many birds have forsaken their old home, the Chough among them; and that others which were formerly wont to use it as a resting-place are now scared from doing so.

Both Partridges and Grouse have at various times been introduced on Lundy, only to be destroyed by the rats which swarm all over the island. The Common Sparrow is only seen as an occasional winter visitor; and in the list of birds which nest upon it, all the Tits are absent. The Jackdaw is only a chance visitor, and does not nest. It is, of course, in the summer, when thousands of birds still resort to its cliffs to breed, that Lundy possesses the greatest interest for the lover of birds. The swarms of Puffins, Guillemots, Razor-bill Auks, Gannets, Kittiwakes, Herring-Gulls, Greater and Lesser Black-backed Gulls, together with Shags and Cormorants, then to be seen at the northern end are indeed astounding; while concealed underground during the day are the Manx Shearwaters and Storm-Petrels, which only issue from their burrows at night. The variety of the Common Guillemot, known as the Bridled Guillemot, occurs in limited numbers.

In old times the inhabitants made a trade by netting the Puffins and Guillemots, plucking them and selling their feathers; and of late years the birds have been persecuted by the Channel

pilots and others, who have either robbed their nests or cruelly shot them for their feathers, and the Gannets, especially, have been driven from pillar to post and greatly reduced in numbers.

Mr. Howard Saunders, in his account of the Kittiwake (Yarrell's B. Birds, 4th ed. p. 653), has given a sickening history of the way in which this beautiful Gull was quite recently massacred at Lundy for the sake of its wings, for which there was at the time a great demand for ladies' hats. "At Clovelly, opposite Lundy Island, there was a regular staff for preparing the plumes; and fishing-smacks, with extra boats and crews, used to commence their work of destruction at Lundy Island by daybreak on the 1st of August [when the close time under the Sea Birds' Preservation Act expired], continuing this proceeding for upwards of a fortnight. In many cases the wings were torn off the wounded birds before they were dead, the mangled victims being tossed back into the water." The result of this cruelty was that he himself had seen "hundreds of young birds dead or dying of starvation in the nests, through want of their parents' care; for in the heat of the fusillade no distinction was made between old and young. On one day 700 birds were sent back to Clovelly, on another 500, and so on; and, allowing for the starved nestlings, it is well within the mark to say that at least 9000 of these inoffensive birds were destroyed during the fortnight."

From the description sent us by the Rev. H. G. Heaven of a little bird seen by him early in October in 1876, it is probable that the island was visited by a species of *Vireo* ("Greenlets"), a large and widely dispersed North-American genus of small Flycatchers. We copy the very full account given of the bird by Mr. Heaven:— "Size: about that of the Robin, perhaps slightly more robust in contour, but tail shorter in proportion. Plumage: upper parts of head, neck, back, tail, and wing-coverts uniform ashen grey with an olive-green tint in certain lights; wings and tail umber-brown, but with an ashen-grey tint on them, as though dusted with very fine powder; secondaries and tertiaries tipped with dull white, producing bars on the wings when closed; legs, beak, and eyes black, or very dark brown; the eyes a very marked feature, being very large, full, and brilliant, and set in lids fringed with an edging of the purest white, so that the eye looked like a brilliant jet bead set

in a circlet of pearls ; the whole of the underparts a pure spotless white, with a lustre upon it very similar to that on the breast of a Grebe, giving almost an iridescence in the sun under certain movements of the bird. I observed it in company with some Flycatchers and Whitethroats, which it much resembled at a distance, but rather exceeded in size apparently. It was very active and lively, and not at all shy, frequently coming within a few yards of where I and my sister were sitting. It was very busy catching insects, sometimes on the wing, sometimes pouncing on them on the ground, and sometimes hunting for them in the bushes, being not unlike a Tit in its restlessness and movements." As two examples of *Vireo olivaceus*, Vieill., the Red-eyed Vireo, have been caught near Derby (Saunders's 'Manual of British Birds,' p. 146), there would be nothing unprecedented in another member of the genus, perhaps the Western form of the Solitary Vireo, *Vireo solitarius*, var. *plumbeus*, Allen, having paid a visit to Lundy, and it would be only another instance of North-American birds appearing in Devonshire and Cornwall.

CHANGES IN THE COUNTY ORNIS.

THE changes which have taken place in the Avifauna of the United Kingdom during the last century are more conspicuous in such a county as Devonshire, perhaps, than in many others, both because it presented greater scope for them, and also that the causes which led to them have been more far-reaching. The idea which the Devonshire ornithologist of the present day forms of his county as it was a hundred years ago is that of a Snipe-and-rabbit-frequented district, for the most part, where buzzards and harriers were numerous, while wild-fowl and waders abounded in the estuaries. Drainage and embankment of salt-marshes, enclosure of commons, conversion of rushy swamps into sound meadow-land, have all helped to restrict the happy hunting-grounds of the Snipe, that, at the time to which our own recollection reaches back, was still so plentiful that school-boys home for the Christmas holidays were entered at it, instead of at the

customary *Turdidæ*. Then, the old days when there were but few sportsmen abroad with their flint-and-steel single barrels have been replaced by a new age in which there are more breechloaders than Snipe. The extermination of the larger birds of prey has brought about a great increase of small birds; the Thrush family, in particular, have benefited by the removal of their natural enemies. The greater amenity of the county resulting from improved cultivation has invited some of the summer migrants to visit it in greater numbers; the Redstart and the Nightingale may be mentioned among those which appear to be annually extending their range further to the west. Better farming has been favourable to the Partridge, which, once comparatively scarce, has now in many parts of the county become abundant. The Royston Crow, for some reason or other, no longer visits the south-western counties regularly in the winter as it did formerly; and the Raven is comparatively seldom seen. The Chough and Rock-Dove are becoming very rare along our coasts, and will, we fear, soon altogether disappear; while the Stock-Dove is increasing in numbers, and has lately established itself in the north of the county, where it had been previously unknown. The Mistle-Thrush, Rook, Lapwing, Moor-hen, and Ring-Dove have also become more numerous.

A noteworthy event in our Devonshire Ornis has been the occupation of nearly the whole county by the Starling as a resident species. In our school-days Starlings were chiefly winter visitors, appearing in the autumn in the north of the county in large flocks; we have still immense arrivals of foreign birds in the autumn, but there are now also numerous resident Starlings nesting commonly in most districts. We have already, in our Introduction, spoken of the prejudicial effects of railways upon a local ornis. The estuaries of both Taw and Torridge in the north of the county, of Exe, Teign, and Dart in the south, have been ruined as bird-haunts by the frequent trains running along their banks, frightening the birds from the sands and oozes. Added to this we must not forget to state that for almost every bird still bold enough to enter there is a shore-gunner on the watch. Things were indeed becoming desperate for our wild-fowl and Limicolæ, but we have lately derived some little comfort through hearing of an improve-

ment in their numbers in the South Devon estuaries which is ascribed to the Sea Birds' Preservation Act. But, nevertheless, the old characteristic Ornis of the county is passing away; and the changes we have briefly pointed out must naturally follow the causes we have assigned for them.

THE FAUNISTIC POSITION OF SPECIES.

DEVONSHIRE possesses a very extensive avifauna owing to its unique geographical position, and probably more species of birds have been met with within its confines than in any other county of England, with the sole exception of Yorkshire.

We have included 292 species in our ornis, and have excluded 29 others whose occurrence has been incorrectly recorded, or rests upon insufficient evidence, or which were undoubtedly escapes. Six of these, however, are not unlikely to occur in Devonshire, and may really have done so. Probably our ornis falls little short of 300 species.

Definitions modified from 'Handbook of Yorkshire Vertebrata.'

RESIDENTS are species which are found in some part of the county throughout the year, and breed therein *annually*, though perhaps only in small numbers. Many Residents as *species* are, however, migratory, some or all of the individuals inhabiting a district moving south in autumn, their places being taken by other individuals from the north, or at all events their numbers are recruited by immigration or lessened by emigration.

SUMMER MIGRANTS are species which appear annually in spring, remain through the summer to breed, and depart in autumn, some, however, occasionally remaining during the winter months.

WINTER VISITORS are species which appear annually, or in most years, in the autumn, and remain in more or less numbers throughout the winter, departing in spring for their breeding-

haunts ; some may, however, occasionally remain during the summer, and some may breed in *isolated* instances in the county.

PASSING OR TRANSIENT VISITORS are species having a double migration, and which are usually observed in the county only on their annual passage to and from their breeding-places in spring or autumn, or both. Exceptionally some may remain with us during the winter.

CASUAL VISITORS are species whose appearance in the county is uncertain, but whose occurrence—they being resident in, or more or less regular visitors to, other parts of the British Islands—is not improbable, even though their visits may be very few and far between. Some of them may have once been Residents, and may still occasionally remain to breed.

ACCIDENTAL VISITORS are mere waifs and strays—species whose geographical range or habits render their occurrence in Britain quite exceptional, and more or less remarkable.

INTRODUCED OR NATURALIZED SPECIES are semi-domesticated, but occur in a state of nature and breed.

Following the excellent plan of the 'Handbook of Yorkshire Vertebrata,' by Messrs. W. Eagle Clarke and W. Denison Roebuck, in comparing the avifaunas of neighbouring counties, we have made a careful analysis of the avifauna of the four south-western or peninsular counties of England, and the results are shown in the subjoined table. For Cornwall we have taken as our text-book Rodd's 'Birds of Cornwall,' edited by Mr. J. E. Harting; for Dorset, Mansel-Pleydell's 'Birds of Dorset;' and for Somerset, Cecil Smith's 'Birds of Somerset;' adding to them, however, such species as have been obtained in those counties since the publication of the above-named works, amounting to no less than 32 for Somerset, 7 for Cornwall, and 2 for Dorset. As twenty-one species have occurred in Cornwall which have not yet been recorded from Devonshire, and three in Somerset that have not been obtained in either of those counties, the total number of birds occurring in the South-western Peninsula will be found to amount to 316, exclusive of doubtful species. Yorkshire boasts of 307 species, and Norfolk 290.

	Cornwall.	Devon.	Dorset.	Somerset.
Residents	74	84	75	68
Summer Migrants	28	30	34	34
Forming together a total of Annual Breeders ..	102	114	109	102
Winter Visitors	38	39	36	25
Passing Visitors	21	16	22	11
Casual Visitors	75	68	70	86
Accidental Visitors	51	49	15	21
Introduced Species	4	6	4	5
	291	292	256	250
Doubtful Species	7	29	10	1

Six of the doubtful species have very probably really occurred in the county, so that the total number of species for Devonshire may be put down as 298.

The number of Devonshire Birds according to different Authors :—

Dr. E Moore, 1830-37.....	243
J. C. Bellamy, 1839	247
J. Brooking Rowe, 1862-3	268
W. S. M. D'Urban, 1875	276
E. Parfitt, 1876	273 (exclusive of 23 errors and doubtful
Pidsley and Macpherson, 1890....	287 [species.)
D'Urban and Mathew, 1891	292 (exclusive of 29 doubtful species).

The number of British Birds according to different Authors :—

J. E. Harting.....	400
'Ibis' List of B. O. U.....	376 (and 76 doubtful species).
Howard Saunders	368

The species which breed in Devonshire are no less than 128 in number.

Besides our 114 Annual Breeders,
 5 Winter Visitors, } have been known to
 1 Passing Visitor, } breed in the county
 8 Casual Visitors } in isolated instances.

128 Total number of Breeders.

In addition six Introduced Species also breed, and the following

species are reported, with some probability, to have formerly bred in the county, viz. :—Wryneck, White-tailed Eagle, Kite, Osprey, Little Bittern, and Golden Plover.

The RESIDENT BIRDS are *eighty-four* in number :—

Mistle-Thrush.	Yellow Hammer.	Wild Duck.
Song-Thrush.	Cirl Bunting.	Teal.
Blackbird.	Reed-Bunting.	Ring-Dove.
Stonechat.	Starling.	Stock-Dove.
Redbreast.	Chough.	Rock-Dove (?).
Dartford Warbler (extinct ?).	Jay.	Partridge.
Goldcrest.	Magpie.	Black Grouse.
Hedge-Sparrow.	Jackdaw.	Water-Rail.
Dipper.	Carrion-Crow.	Moor-hen.
British Long-tailed Titmouse.	Rook.	Coot.
Great Titmouse.	Raven.	Ringed Plover.
British Coal Titmouse.	Sky-Lark.	Lapwing.
Marsh-Titmouse.	Wood-Lark.	Oyster-catcher.
Blue Titmouse.	Great Spotted Woodpecker.	Common Snipe.
Nuthatch.	Lesser Spotted Woodpecker.	Woodcock.
Wren.	Green Woodpecker.	Dunlin (?).
Pied Wagtail.	Kingfisher.	Green Sandpiper (?).
Grey Wagtail.	Barn-Owl.	Curlew.
Meadow-Pipit.	Tawny Owl.	Kittiwake.
Rock-Pipit.	Buzzard.	Herring-Gull.
Tree-Creeper.	Sparrow-Hawk.	Lesser Black-backed Gull.
Goldfinch.	Peregrine.	Greater Black-backed Gull.
Greenfinch.	Kestrel.	Storm-Petrel.
House-Sparrow.	Cormorant.	Manx Shearwater.
Chaffinch.	Shag.	Little Grebe.
Linnet.	Gannet.	Razorbill.
Bullfinch.	Heron.	Common Guillemot.
Corn-Bunting.	Common Sheldrake.	Puffin.

Amongst the above eighty-four RESIDENT BIRDS the following species may be particularly noticed :—

The Dartford Warbler is, or was, resident in Devonshire as well as in Cornwall and Dorset, but does not appear to be found in Somerset. We have not heard of the occurrence of any specimens since 1877, and we much fear this interesting bird has become extinct in the county, as it is said to be in Dorset, owing

to the severe cold in the winter of 1886 and 1887. The Grey Wagtail is now well-known to be resident in Cornwall, Devon, and Somerset, though only a winter visitor to Dorset. The Cirl Bunting is a rather local species, whose breeding-habits, like those of the Dartford Warbler, were first described from observations made in this county by Col. Montagu. This Bunting was added to the British List by that accomplished naturalist, he having first observed it in South Devon. The Starling, formerly only a winter visitor to the western part of the county, now breeds throughout its limits, except upon Dartmoor, and has enormously increased in numbers. Those that breed with us are, however, few compared with the vast flocks that visit us in winter. The Chough, once a common bird on the sea-cliffs, is now reduced to a few pairs which breed in some places on the north coast. The Raven, the Buzzard, and the Peregrine have been subjected to great persecution, but still contrive to keep a footing here and there in wild and inaccessible places. The Corn-Bunting, like the Cirl Bunting, is local, and almost confined to the sea-coast. The Goldfinch is less plentiful than formerly, the progress of agriculture depriving it of its favourite food, the seeds of thistles and other composite plants. The Wood-Lark is rather local, but common in some places in the breeding-season, and large numbers are seen on the borders of Dartmoor and on the sea-coast in autumn. The Great Spotted Woodpecker is occasionally seen in wooded parts of the county, and the Lesser Spotted Woodpecker is far from uncommon in many localities. The Stock-Dove, formerly only a winter visitor, has now established itself as a permanent resident, as is also the Rock-Dove, though it is not clear whether the last species is not represented in most places by the Domestic Blue Rock gone wild. The Common Sheldrake is confined to two breeding-stations, one on the north and the other on the south coast. The Wild Duck and Teal principally breed on the Leys of the south-west coast. We have seen the Dunlin solitary and in full breeding-plumage on Dartmoor in June, and it is stated to have bred there formerly, as it has done on the Cornish moors; but we do not know of any recent instance of its nest being found there. The Green Sandpiper, being seen occasionally at all times of the year, very probably breeds some-

where in the county. The Curlew and Snipe breed on many of the moors, especially in the northern part of the county. The Woodcock has frequently nested, and often occurs so early in the season that it may be looked upon as a regular breeder; but the great bulk of the Woodcock and Snipe are winter visitors, as is also the case with most of the Wild Duck and Teal.

The Gannet, Oyster-catcher, Kittiwake, Lesser and Greater Black-backed Gulls, Storm-Petrel, Manx Shearwater, Razorbill, and Puffin are almost all confined to Lundy Island in the breeding-season. The Shag and Cormorant breed on both the north and the south coast and on Lundy Island. There are more than a dozen Heronries in the county.

The SUMMER MIGRANTS are *thirty* in number, as follows:—

Ring-Ouzel.	Wood-Warbler.	Sand-Martin.
Wheatear.	Sedge-Warbler.	Swift.
Whinchat.	Grasshopper Warbler.	Nightjar.
Redstart.	White Wagtail.	Hoopoe.
Nightingale.	Yellow Wagtail.	Cuckoo.
Whitethroat.	Tree-Pipit.	Hobby.
Blackcap.	Red-backed Shrike.	Turtle Dove.
Garden Warbler.	Spotted Flycatcher.	Quail.
Chiffchaff.	Swallow.	Corn-Crake.
Willow-Warbler.	Martin.	Common Sandpiper.

Of these the Ring-Ouzel and Common Sandpiper breed on Dartmoor and parts of N.E. Devon bordering on the moors. The Whinchat, Nightingale, Wood-Warbler, Grasshopper Warbler, White Wagtail, Hobby, and Turtle Dove are local species, and none of them are very numerous. The Nightingale finds its western limit in this county, and has lately penetrated to the extreme western boundary; and as it has been known to breed on several occasions, we include it with the regular summer migrants. The Redstart, though most numerous in the north and east of the county, is occasionally found breeding in the extreme western portion. The Hoopoe occurs so frequently that it has claims to be looked upon as a regular summer migrant, though it is not common. It is said to have bred in the county.

The WINTER VISITORS number *thirty-nine* :—

Redwing.	White-fronted Goose.	Smew.
Fieldfare.	Brent Goose.	Golden Plover (B. ?).
Black Redstart.	Wigeon.	Grey Plover.
Great Grey Shrike.	Pintail.	Jack Snipe.
Siskin.	Shoveller.	Purple Sandpiper.
Hawfinch (B.).	Tufted Duck (B.).	Sanderling.
Brambling.	Scaup.	Common Gull.
Lesser Redpoll (B.).	Pochard.	Black-headed Gull.
Snow-Bunting.	Golden-eye.	Great Northern Diver.
Long-eared Owl (B.).	Long-tailed Duck.	Red-throated Diver.
Short-eared Owl.	Common Scoter.	Great Crested Grebe.
Merlin (B.).	Goosander.	Slavonian Grebe.
Bittern.	Red-breasted Merganser.	Greater Shearwater.

The Black Redstart is met with in winter all along the southern coast of the county, but most numerous between Teignmouth and Plymouth. It has been obtained occasionally also in North Devon. The Great Grey Shrike has occurred often enough to be placed in the list of winter visitors. The Siskin, Hawfinch, Brambling, Lesser Redpoll, and Snow-Bunting are of irregular appearance, none being seen in some winters, whilst in others they are more or less abundant. The Hawfinch has bred near Kingsbridge, and the Lesser Redpoll is believed to have done so in North Devon. The Brambling has occurred in July in N. Devon, and is reported to have bred at Topsham, but probably in captivity. The Long-eared Owl has been known to breed, but is usually a winter visitor to Devon. The Merlin has been seen in summer, and is said to have bred. The Golden Plover is sometimes seen late in the spring with black breast, and is said to have formerly bred on Dartmoor. The Tufted Duck probably breeds occasionally on Slapton and Torcross Leys and also near Barnstaple. The Sanderling used to appear on the Exe estuary in large flocks in winter, but does not seem to be so plentiful elsewhere. The Bittern, White-fronted Goose, Pintail, Shoveller, Tufted Duck, Pochard, Golden-eye, Long-tailed Duck, Goosander, Smew, Great Crested Grebe, and Slavonian Grebe usually occur in small numbers only. Some of them are, however, occasionally numerous in severe winters, large flocks of Shovellers and of Tufted Ducks being sometimes seen. The Scaup and Common Scoter occur in large flocks in autumn. The Greater Shearwater comes to us from the Atlantic Ocean, being occasionally seen in great numbers in the Channel.

The PASSING OR TRANSIENT VISITORS, with a double migration in spring and autumn, are *sixteen* :—

Garganey.	Knot.	Arctic Tern.
Spotted Crake.	Redshank (B. ?).	Common Tern.
Turnstone.	Greenshank.	Black Tern.
Grey Phalarope.	Bar-tailed Godwit.	Pomatorhine Skua.
Little Stint.	Whimbrel.	Richardson's Skua.
Curlew Sandpiper.		

The Garganey is seen only in spring, and was unusually numerous in 1870. The Spotted Crake now occurs principally in the autumn. The Grey Phalarope is rarely seen except in autumn, and is of irregular appearance, in some years great flights visiting us and in others few being observed, depending on the occurrence of southerly gales during the period of migration. The Little Stint is usually rare on the south coast, but sometimes occurs in considerable flocks, especially in spring. On the north coast it used to be met with every autumn on the sands of the Taw. The Curlew Sandpiper, Knot, and Bar-tailed Godwit sometimes occur in breeding-plumage in spring and summer, and occasionally remain throughout the winter on the south coast, but are mainly autumnal visitors. The Redshank, no doubt, was formerly a resident and may possibly still breed with us in small numbers, being seen at all times of the year. The Greenshank and Whimbrel are sometimes, but rarely, seen in winter. The former is never plentiful. Vast flights of Arctic, Common, and Black Terns, Pomatorhine and Richardson's Skuas sometimes visit the south coast in autumn.

The CASUAL VISITORS are *sixty-eight* in number :—

Lesser Whitethroat (3).	Mealy Redpoll (1).
Fire-crest (4 or 5).	Twite.
Reed-Warbler (2 or 3).	Crossbill (B.).
Bearded Titmouse (B.).	Rose-coloured Pastor (21).
Crested Tit (1).	Hooded Crow (B. ?).
Blue-headed Wagtail (7).	Shore-Lark (1).
Richard's Pipit (13).	Wryneck (B. ?).
Golden Oriole (B.).	Marsh-Harrier (B.).
Waxwing.	Hen-Harrier (B.).
Pied Flycatcher (B.).	Montagu's Harrier (B.).
Tree-Sparrow.	Rough-legged Buzzard (15).

White-tailed Eagle (B. ?).	Avocet (27).
Kite (6, B. ?).	Red-necked Phalarope (2).
Honey-Buzzard (7).	Great Snipe (20).
Osprey (20, B. ?).	Temminck's Stint (3).
Little Bittern (11, B. ?).	Ruff.
Night-Heron (13, B.).	Wood-Sandpiper (7).
White Stork (4).	Spotted Redshank (13).
Spoonbill (10).	Black-tailed Godwit.
Grey Lag Goose (8).	Little Tern.
Bean-Goose.	Sandwich Tern.
Barnacle Goose.	Glaucous Gull.
Whooper Swan.	Iceland Gull.
Bewick's Swan.	Little Gull.
Gadwall (10).	Common Skua.
Eider Duck (12).	Buffon's Skua (21).
Velvet Scoter (10).	Leach's Petrel.
Little Crake (7).	Sooty Shearwater (2).
Crane (2).	Fulmar (6).
Great Bustard (13 or 14).	Black-throated Diver.
Little Bustard (10).	Red-necked Grebe.
Stone-Curlew.	Eared Grebe.
Kentish Plover (2).	Black Guillemot (7).
Dotterel.	Little Auk (25 or 30).

The Lesser Whitethroat is very rare, but has been reported as breeding in both South and North Devon, most probably erroneously. The Reed-Warbler has been observed at Slapton Ley, but none have been seen for the last twenty years anywhere in the county. The Bearded Titmouse has also been seen at Slapton and in North Devon. It formerly bred in Devon, and, according to Mr. Howard Saunders, does so still. The Blue-headed Wagtail has occurred about seven times in the south-western part of the county. No Waxwings have been seen in Devon since the winter of 1849-50. The Golden Oriole, Crossbill, Hooded Crow, Marsh-Harrier, Hen-Harrier, and Montagu's Harrier are all believed to have bred within the limits of the county. All the Harriers are now more or less scarce, though formerly numerous. Montagu's Harrier was once a regular summer migrant. The Osprey was frequently met with on our estuaries, and formerly bred both on the south coast and Lundy Island. The White-tailed Eagle and the Kite also formerly bred. The Tree-Sparrow finds its western, and the Twite its southern limit in this county, as they

are almost unknown in Cornwall. The first is a local resident in Somerset and Dorset, and appears increasing as a winter visitor to the south of Devon. The latter is known to us only in North Devon, where it is an occasional autumnal visitor. It is rare in Somerset and Dorset. Both the Little Bittern and Night-Heron have very probably bred in this county. The Stone-Curlew occurs only in winter in Cornwall, Devon, and Somerset, though a summer migrant to Dorset. It is said to have bred in the neighbourhood of Dartmoor, but probably in error. The Dotterel, Great Snipe, Ruff, Wood-Sandpiper, Spotted Redshank, and Black-tailed Godwit are autumnal migrants, but occur so seldom that they can only be considered casuals. The Ruff and Black-tailed Godwit have both occurred in breeding-plumage. The Common or Great Skua has become very rare on our coasts. A large flight of Buffon's Skua, which was previously extremely rare, occurred in October 1891, and many were obtained on both our coasts. Only two specimens of the Sooty Shearwater have been met with, both at Plymouth.

The Fire-crest, Crested Tit, Shore-Lark, Crane, Kentish Plover, Red-necked Phalarope, and Temminck's Stint have occurred but very rarely.

The Pied Flycatcher is most numerous in North Devon, and is believed to have bred.

The ACCIDENTAL VISITORS number *forty-nine* :—

White's Thrush (1). Asia.	Serin (1). C. and S. Europe and N. Africa.
Red-spotted Blue-throat (2 ?). Arctic Europe and Asia.	[Parrot Crossbill (several). N. Europe.]
Black-headed Warbler (1). Southern Europe.	White-winged Crossbill (1). N. America.
Rufous Warbler (2). S. Europe and N.W. Africa.	Nutcracker (6 or 7). N. and C. Europe and Asia.
Alpine Accentor (5). S. and E. Europe.	Crested Lark (2). Europe and Asia.
Water-Pipit (2). C. and S. Europe and Africa.	White-bellied Swift (1). C. and S. Europe and Asia.
Lesser Grey Shrike (1). C. Europe and N. Africa.	Roller (5). Europe.
Woodchat (3). C. and S. Europe and N. Africa.	Bee-eater (7). S. Europe, N. Africa, W. Asia.

- Yellow-billed Cuckoo (1).
 N. America.
 Snowy Owl (2 or 3).
 Circumpolar Regions.
 Hawk-Owl (1).
 Northern Regions.
 Little Owl (5).
 S. and C. Europe, Asia Minor.
 Greenland Falcon (2 or 3).
 N.E. America and Greenland.
 Red-footed Falcon (2 or 3?).
 S.E. Europe and W. Asia.
 Purple Heron (6).
 Temp. and Trop. parts of E. Hemisphere.
 Little Egret (4 or 5).
 S. Europe, Asia, and Africa.
 Buff-backed Heron (1 or 2?).
 S. Europe, W. Asia, and Africa.
 Squacco Heron (5).
 S. Europe and Africa.
 American Bittern (2).
 N. America.
 Black Stork (2?).
 Palearctic Regions, India and Africa.
 Glossy Ibis (8 or 9?).
 Southern Europe, &c.
 Red-breasted Goose (2).
 N.W. Siberia.
 American Green-winged Teal (1).
 N. America.
 Red-crested Pochard (1).
 Palearctic Regions.
 White-eyed Duck (2).
 S. Palearctic Region.
 Surf-Scoter (3).
 Nearctic Region.
 Pallas's Sand-Grouse (18).
 Central Asia.
 Cream-coloured Courser (3).
 N. Africa and W. Asia.
 Black-winged Stilt (2 or 3).
 S. Europe and Africa.
 Pectoral Sandpiper (4).
 N. America.
 Bonaparte's Sandpiper (4).
 N. America.
 American Stint (1).
 N. America.
 Buff-breasted Sandpiper (1 or 2?).
 N. America.
 Red-breasted Snipe (4).
 N. America.
 Caspian Tern (2 or 3).
 Palearctic and Nearctic Regions.
 Gull-billed Tern (1 or 2).
 C. and S. Palearctic Regions.
 Whiskered Tern (1).
 Southern Regions.
 White-winged Black Tern (3).
 S. and C. Palearctic Regions.
 Ivory Gull (1).
 Arctic Regions.
 Great Black-headed Gull (1).
 Asia.
 Sabine's Gull (7).
 Arctic Regions.
 Wilson's Petrel (2).
 Atlantic Ocean.

Two or three Red-spotted Blue-throats have been recorded from Devonshire, but we consider two of these occurrences hardly satisfactorily proved. Two out of the three Rufous Warblers which have been obtained in England occurred in South Devon. A Black-headed Warbler seen by us at Exmouth in April 1890 happened to perch close to a male Blackcap, enabling us to compare the two species; and the description in Dresser's 'Birds of Europe' so exactly

corresponds with the bird we saw that we consider ourselves justified in admitting it into our census of species, though it has not previously been noticed in the British Islands. The Woodchat is reported to have occurred several times, but it is somewhat doubtful whether the specimens obtained were really procured in the county. It has, however, been killed in the neighbouring counties, and there seems no reason why it should not visit Devonshire occasionally. The Water-Pipit has several times been reported from the county, but the specimens have always proved to be varieties of the Rock-Pipit. However, Mr. Gatcombe and ourselves have seen specimens that we felt sure were really Water-Pipits. The White-winged Crossbill found dead amongst the rocks at Exmouth in 1845 had probably had an assisted passage from America on the rigging of some vessel passing up the Channel, and, being exhausted by want of food, fell into the sea to be washed up on our coast. The large-billed Scandinavian race of the Common Crossbill, known as the Parrot Crossbill, has occurred but once only in the county, when a large flock was observed near Exmouth in 1888. The Yellow-billed Cuckoo is considered of doubtful occurrence by many ornithologists in the British Islands; but, as many other species of North-American birds have visited Devon and Cornwall, there seems to be no inherent improbability in this species having been found dead as reported on Lundy Island, and we have therefore admitted it to our census of species. All the specimens of the Little Owl were probably only escapes, as it is so often imported to England. Although the only specimen of the Hawk-Owl reported from Devonshire was not killed, yet, having been seen by a competent observer, we have admitted it into our census, especially as other specimens have been obtained in the West of England. According to Mr. Howard Saunders, the example of the Little Egret in full adult plumage killed on the Exe in 1870 is the only one about which there can be no doubt as having been obtained in the British Islands. The Buff-backed Herons killed in Devonshire appear to be the only specimens which have really occurred in Britain. The Great Black-headed Gull shot at Exmouth in 1859 is likewise the only British-killed specimen.

About 30 of the above enumerated Accidental Visitors have been met with only once or twice. Twenty-four of the forty-

nine come from Southern Europe and North Africa, eleven from Northern Europe and Asia, twelve from North America, and two from the Atlantic.

INTRODUCED OR NATURALIZED SPECIES number six, marked with an asterisk in the Catalogue :—

Egyptian Goose.	Summer Duck.	Red-legged Partridge.
Canada Goose.	[Collared Turtle.]	
Mute Swan.	Pheasant.	

The Egyptian and Canada Geese and the Summer Duck, being so frequently kept on ponds in a semi-domesticated state, breeding freely and wandering at will over the country, are on the same footing as the Mute Swan and Pheasant, which have also been introduced and naturalized, but which would be exterminated if not protected. The Collared Turtle has been killed in a wild state near Plymouth, and is believed to breed in some of the woods and plantations in that neighbourhood. The Red-legged Partridge has been introduced in several parts of the county, but does not appear to be established.

The following twenty-nine species have been recorded as occurring in the county either altogether erroneously, or upon insufficient evidence, or were introduced and escaped; but at least six of them are not unlikely to have occurred, and may have done so, viz. :—the Icterine Warbler (or the allied species, *Hypolais polyglotta*), Short-toed Lark, Spotted Eagle, Baillon's Crake, Collared Pratincole, and Roseate Tern. We have not reckoned these doubtful species in the census, and they are included in square brackets in our Catalogue :—

Great Reed-Warbler.	Iceland Falcon.	Ptarmigan.
Icterine Warbler.	Goshawk.	Baillon's Crake.
Savi's Warbler.	Great White Heron.	Collared Pratincole.
Pine-Grosbeak.	Pink-footed Goose.	Little Ringed Plover.
Calandra Lark.	Ruddy Sheldrake.	Spotted Sandpiper.
Short-toed Lark.	Buffel-headed Duck.	Yellowshank.
Great Black Woodpecker.	Harlequin Duck.	Roseate Tern.
Eagle Owl.	King Eider.	Sooty Tern.
Golden Eagle.	Hooded Merganser.	Great Auk.
Spotted Eagle.	Red Grouse.	

The Parrot Crossbill has been suppressed as a distinct species, although recognized as such by the Committee of the British Ornithologists' Union.

COLLECTIONS OF BIRDS IN DEVONSHIRE.

PUBLIC INSTITUTIONS.

Albert Memorial Museum, Exeter.

Contains the collections formed by F. W. L. Ross, Hon. Mark Rolle, Ralph Sanders, W. Robson Scott, W. Bower Scott, Robert Cumming, W. Tombs, W. Brodrick, H. Michelmore, W. S. M. D'Urban, &c. There are many local and rare specimens in the British Collection, the most remarkable being the Great Black-headed Gull shot at Exmouth.

Torquay Natural History Society's Museum.

The specimens were collected principally in the neighbourhood of Torbay by W. Else and the late E. Burt, the Curators. It contains the only Devonshire Ivory Gull, a nearly adult bird.

Plymouth Institution and Devon and Cornwall Natural History Society's Museum at the Athenæum, Plymouth.

Contains the collections formed by the Rev. R. A. Julian, Mr. Christopher Bulteel, the Rev. Alan Furneaux, &c. The localities are unfortunately not attached to the numerous rare British species represented. We are indebted to Mr. H. M. Evans, the Hon. Curator, for information respecting these collections.

Kingsbridge Museum, Town Hall, Kingsbridge.

The birds preserved here formed part of the collection of Mr. Charles Prideaux of Kingsbridge, but there is nothing of local interest among them.

United Service College Museum, Westward Ho!

A collection of local birds is being made, chiefly from the estuaries of the Taw and Torridge, which already contains several good birds; among them is the Braunton Ruddy Sheldrake.

PRIVATE COLLECTIONS.

Sir HENRY PEEK, Bart., M.P., Rousdon, near Lyme Regis.

A splendid collection of British Birds is arranged in a series of large wall-cases, placed around the corridor at Rousdon. It was formed by Messrs. Swaysland, the well-known taxidermists of Brighton. An elaborate catalogue of the specimens has been printed, and the references are to numbers on an outline index plate of each case. The specimens are not local, but those species which have been observed in the Parish of Rousdon, or at sea off that locality, are marked with an asterisk in the list.

Mrs. MARSH-DUNN, Carlton Lodge, Teignmouth.

A remarkably fine collection of British Birds, many of them of great rarity, formed by the late Mr. Marsh-Dunn. It contains the Red-crested Pochard shot at Braunton. The collection formed by the late Mr. Byne of Milligan Hall, near Taunton, was purchased by Mr. Marsh-Dunn, and was amalgamated with his own.

RICHARD ANDREW, of Traine, Modbury.

This gentleman possesses an interesting collection of Local Birds, formed by himself, and he purchased that made by the Rev. Courtenay Bulteel, of Kingston. There are specimens of the Blue-headed Wagtail obtained by Mr. R. P. Nicholls at Huish Ley, and of the Night-Heron shot on the Erme by Mr. Bulteel.

Mrs. ELLIOT, Tresillian, Kingsbridge.

A very fine collection, especially rich in Raptorial Birds, was formed by the late Mr. John Elliot, and is now in the possession of his widow. It contains some of the specimens sold when the collection of the late Rev. Kerr Vaughan was dispersed. There are many most interesting birds, principally obtained in the Kingsbridge district.

EDMUND A. S. ELLIOT, M.R.C.S., L.R.C.P., Albert Villa, Kingsbridge.

An extensive series of skins of British Birds, principally from the Kingsbridge estuary and neighbourhood. It contains specimens of the Avocet, Surf-Scoter, Buffon's Skua, Sabine's Gull, &c.

HENRY NICHOLLS, Roselands, Kingsbridge.

In this collection there are many fine examples of the rarer birds of prey obtained in the Kingsbridge district, the American Green-winged Teal shot on the estuary near Kingsbridge, and other interesting specimens.

R. P. NICHOLLS, Fore Street, Kingsbridge.

A very extensive collection of North-American Birds, and some scarce British species.

Mrs. W. BASTARD, Oakhill, Slapton.

A collection formed by the late Mr. W. Bastard. It contains the specimens of the Rufous Warbler shot near Slapton, and of the Gadwall killed on Slapton Ley.

J. BROOKING ROWE, F.L.S., Castle Barbican, Plympton.

Many interesting birds, including the only known Devonshire specimen of the Gull-billed Tern.

F. C. HINGSTON, 7 Lockyer Street, Plymouth.

A beautiful and well-mounted collection containing many rare species. Contains one of the only two Kentish Plovers killed in Devon.

WALTER V. TOLL, Manor House, Strete, near Dartmouth.

A small collection—contains one of the Bean-Geese shot at Slapton Ley.

Sir LYDSTON NEWMAN, Bart., Stokenham, near Kingsbridge.

An extensive collection, including many species of aquatic birds killed on Slapton Ley, and amongst them is a full-plumaged Black-throated Diver.

The Rev. W. S. HORE.

This fine collection, chiefly acquired at Plymouth, was bequeathed by Mr. Hore to Mrs. Connop of Bradfield Hall. It contains many rare birds which were purchased from the old bird-stuffers of Devonport, &c., and from various other collections, such as that of Mr. Cornelius Tripe and the Rev. Kerr Vaughan. Among the rarer Devon birds are the Snowy Owl, female Purple Heron, and Buffel-headed Duck, all said to have been procured in the immediate neighbourhood of Plymouth.

FRANCIS PERSHOUSE, Torquay.

Mr. Pershouse's collection contains about 900 specimens of British Birds collected in Devon, Sussex, and the Orkney Islands, beautifully mounted and cased by himself. There are examples of the White-bellied Brent, Greater Shearwater, and Black Guillemot from Torbay.

The Rt. Hon. the EARL of MORLEY, Saltram, Plympton St. Mary.

A. CLAYFIELD IRELAND, Dowlich House, Crediton.

A. F. HOLDSWORTH, C.C., Widdicombe, Stokenham.

SIR JOHN ROGERS, Bart., Blachford, Ivybridge.

Collections containing Devonshire Birds not in the County.

Natural History Museum, South Kensington (Col. MONTAGU's collection).

Taunton Castle Museum (Dr. WOODFORDE's collection).

Frome Literary Institution (Mr. HORNER's collection).

REV. MURRAY A. MATHEW, Buckland Dinham, Frome, Somerset.

LINES OF MIGRATION.

ANYONE who considers the position of Devonshire upon the map, and its comparative remoteness from the Continent, will, if he is acquainted with the fact that the main body of migrating birds approaches the British Islands from the East, hardly expect that the county would be a large sharer in this foreign contingent. And this supposition would be only a reasonable one; however, we shall proceed to point out that, notwithstanding the thinning-out process westwards, numerous migrants, both in the spring and autumn, find their way to our county by various, perhaps unexpected, routes.

Much has been added to our knowledge of the routes selected by various species of birds when arriving on, and departing from, the shores of the British Islands during their autumnal and vernal migrations, by the Reports of the Migration Committee of

the British Association. Many points about which there was obscurity have been cleared up, and much that was extremely puzzling to students of Bird Migration has been explained. It is not without considerable diffidence and hesitation that we offer to our readers the two outline maps at the end of the book illustrating the Migration of Birds. We have long hoped that the Committee of the British Association would have seen its way to the publication of a map or maps showing the results deduced from the observations made under its auspices at the Lighthouses on the British Coasts, but as none have appeared we have made an attempt, imperfect in many respects, as we are well aware, to lay down on Migration Map No. 2 (Arrival Routes) the broader and more salient facts, as we understand them, so as to illustrate and render visible the manner in which so many different streams of Migration converge upon Devonshire and render its Avifauna so extraordinarily rich. There are, however, many facts that cannot well be shown on a single map, and which would require several distinct maps to illustrate properly. There is a simultaneous exodus from the Eastern shores of England to the Continent of the identical species coming from thence to us at the same season. Migrants from Ireland in early autumn appear to cross from the south coast of that island to the north coast of Devon and the shores of the Severn Sea, and probably occasion the influx of Warblers, &c., perceived on the south coast of Devon in August, they having crossed the county from north to south, taking their departure from our south coast when leaving the British Islands for the Continent.

Our object in presenting Map No. 1 is simply to give an idea of the direction from which the principal Streams of Birds approach us in autumn. They come to us from the South-east, East, North-east, North, and North-west at that season, and give quite a cosmopolitan character to our Ornis, as will be apparent to anyone who will read the following pages of our book. We have not attempted to deal in detail with the vast subject of Continental Migrations. All we have considered was how our own County was affected by the various movements of our Feathered Friends. As we investigated the subject we could not help being much impressed by the remarkable manner in which the migratory streams cross each other, but all concentrating on the South-western Peninsula of England. It will be obvious how it is that northern

and southern races of the same species reach us. We have large and small Wheatears, Crossbills, Ring-Plovers, Dunlins, &c., which no doubt come to us from different countries, as it is well known that birds of wide distribution are subject to great variation of form.

Messrs. John Cordeaux, Harvie-Brown, and W. Eagle Clarke have done much to increase our knowledge in this field of research. It is now plainly seen that Land-Birds avoid high lands and mountainous regions when migrating, and adhere year after year to well-defined routes, entering certain openings of the coasts, and generally following river-valleys when passing over land, but, when deep inlets or bays occur in their course, boldly crossing the sea from point to point rather than following the indentations of the coast-line.

It has also been clearly shown that the following are the main lines of migration:—

1. A stream of birds flows from east to west across England, having entered the estuary of "the Wash" after crossing the German Ocean from south-east and north-east (two streams flowing almost at right angles to each other), and following the river-systems of the Nene and Welland into the central plain of England continues along the line of the Avon, and down the estuary of the Severn to the Bristol Channel. Some birds cross the Humber and come down the valley of the Trent through Nottinghamshire to the Welland. Avoiding the mountainous country of Wales, this living stream skirts the Pembroke coast, and, striking across St. George's Channel, reaches the Irish coast at Wexford to spread over the central plain of Ireland.
 - a. A branch from this stream diverges to the S.W. and enters Somerset by Bridgwater Bay, crossing the Bridgwater flats, and, keeping between the Quantocks and Blackdown Hills, passes down the valleys of the Culm, Exe, and Otter, partly spreading to the south-east and partly sweeping round the south of Dartmoor to the South Hams of Devon. By this route we believe the bulk of the Redwings, Fieldfares, Mistle-Thrushes, Song-Thrushes, Golden-crested Wrens, Greenfinches, Chaffinches, Linnets, Redpolls, Siskins, Starlings, Sky-Larks, Long- and Short-eared Owls, Lapwings, Water-Rails, &c. reach the south and east of

Devon in autumn and winter ; and in spring the same route is followed by the Nightingale, Common Redstart (in part), Sedge-Warbler, Grasshopper Warbler, Garden-Warbler, Whitethroat (in part), Spotted Flycatcher, and *sometimes* the House-Martin and Cuckoo, their route being dependent on the prevailing winds and character of the season.

- b.* Another branch from the main stream going down the Bristol Channel enters Devonshire through Barnstaple Bay, supplies the basin of North Devon, and, passing up the valleys of the Taw and Torridge, a portion finds its way down the valley of the Tamar to the Plymouth district, South-western Devon, and East Cornwall. The Black Redstart in autumn especially appears to adhere to this route (having been observed by Mr. Gatcombe to arrive at Plymouth with a northerly wind), and the Pied Flycatcher and Golden Oriole in summer : this explains, we think, the peculiarity of their distribution in Devonshire, and shows why they are so scarce in Eastern Devon. The valley of the Tamar is also a route much followed by migratory Waders in spring on their return northwards—*e. g.* the Curlew Sandpiper.

- c.* A third branch from the main stream coming down the Bristol Channel strikes Lundy Island, skirts the north coast of Cornwall, and passes on to the Scilly Islands and southwards. The Fire-crest seems to follow this route as well as the Wood-Warbler, Lesser Whitethroat, Pied and Red-breasted Flycatchers, Quail, Land-Rail (in part), and Woodcocks (in part). This accounts for the abundance of Woodcocks on Lundy and Scilly Islands when they first arrive, and the curious fact of their arriving on the islands before they do on the mainland. (Chanter, *Trans. Devon. Assoc.*) Reed-Warblers, although so rare in Devon and Cornwall, occasionally strike the Lighthouses of the south-west coast of England.

2. Great streams of autumn migrants from the north-east and south-east are focussed together to pass through the Pentland Firth between Scotland and the Orkneys, and joining similar streams from the Faroe Islands, Iceland, and even Greenland, follow the western coast of Scotland, pass down the Irish and

St. George's Channels, contributing many birds to Lundy Island, the northern part of Devon, and the Scilly Islands. Snow-Buntings and Crossbills, the Gyr Falcon, Snowy and Hawk Owls, and some American Birds seem to come to us by this route. In all probability, as suggested by Mr. Harvie-Brown (Zool. 1880, p. 485), the last do not cross the Atlantic but reach us *viâ* the northern coasts of Asia and Europe. It is remarkable how many American species have occurred in N. Devon and the Land's End district and the Scilly Islands; some few have also occurred at Plymouth and Kingsbridge, probably reaching there by the Tamar valley. This stream is swelled by birds which have crossed the German Ocean, and, entering the Firth of Forth, pass over Scotland to the Irish Channel.

3. Many aquatic birds come down the Irish Channel, but some of those from Greenland, Iceland, and the Faroe Islands keep along the west of Ireland, and a few, like the Glaucous and Iceland Gulls, may round its southern shores and reach us. The Grey Phalarope is supposed to follow this route south, but when a southerly gale blows at migration time they are forced back upon our shores along with some other birds from the north and west, such as Sabine's Gull and the Fork-tailed Petrel.
4. Another stream comes down the English Channel, having been focussed from northerly and easterly directions through the Straits of Dover, and keeps along the French coast as far as Cap de la Hague, where a part is deflected to the N.W., and brings some birds to our south coast. Woodcocks probably come to the Landslip at Dowlands by this route (but they rarely strike the Start and Eddystone Lights), and Ducks, Geese, and flights of Skuas and Terns in autumn. The Terns and Skuas keep well out to sea on their migration to the south, and ordinarily few are seen on our coast; but if they should meet violent south-westerly gales they are driven back upon our south coast, and some are even forced up the Bristol and St. George's Channels. The Ducks, Geese, and Skuas come from the north-east down the eastern coast of England, and continue their course westward down the English Channel. Thus we get the North-eastern form

of Brent Goose on our south coast, the White-bellied or Atlantic form being extremely rare. Some Limicolæ follow all along the shores of the south-east and south coast of England in autumn.

Many summer migrants arrive on our south coast, some apparently coming directly across the Channel from Cap de la Hague, from which the Start Point is distant about 80 miles. The Wheatear, Whinchat, Common Redstart (in part), Willow-Warbler, Chiffchaff, Whitethroat (in part), Blackcap, Wagtails, Pipits, Red-backed Shrike, Swallow, House-Martin (in part), Sand-Martin, Rose-coloured Pastor, Swift, Hoopoe, Roller, Bee-eater, Wryneck, Turtle Dove, Stone-Curlew, Little Bustard, and Little Bittern appear to reach us by this route, all either having been seen coming in from the sea or having been taken on board ships in the Channel; but as some of them are in an exhausted condition when they first arrive we think it most probable that they cross the Bay of Biscay.

A stream of migrants coming from Africa enters France by the Gulf of Lions, and crossing by the valley of the Garonne to the Bay of Biscay, and skirting the French north-west coast, reaches our shores by this longer sea route. Some birds may even come directly to us from North-western Africa, skirting the coasts of Spain and Portugal, and crossing the Bay of Biscay. The fact that many summer birds are seen off the western coasts of Spain in April appears to us to confirm this, and a Green-backed Porphyrion was brought in alive to Plymouth on board a vessel.

Limicolæ coming from the south in spring seem to pass up both the English and St. George's Channels. The Whimbrel is an instance of this—appearing almost simultaneously on our north and south coasts.

Phalaropes and Skuas we think keep to the west of Ireland when they return northwards in spring, as we see but little of them at that season.

Some species, we believe, reach us by more than one route, according to the character of the season and the prevailing winds. The Cuckoo is sometimes heard to the north of Dartmoor before it has arrived at Exmouth. The House-Martin has been seen by Mr. Gatcombe coming in from the sea at Plymouth, and we have observed it migrating in small parties in spring coming from the north-east; and vast numbers appeared at Barnstaple in May

1891. It does not appear at Exmouth till long after it has arrived in Exeter. Yet House-Martins sometimes occur very early in the extreme southern part of Devonshire.

Our migrants do not all arrive simultaneously, but in waves at intervals extending over many weeks, sometimes coming in great "rushes," and they leave us in autumn in the same manner.

In 1887 it was recorded that the first Wheatears were seen at the "Chickens" (Isle of Man) on February 17, and large numbers were passing the Eddystone as late as May 30. Swallows and Swifts were still passing the Eddystone on June 6, and many Swifts on June 24. The autumnal departure began very early, for Swifts and numbers of Swallows were passing to the south on August 19 at the Eddystone, the wind being north by east.

Last year (1891) there were swarms of Whitethroats, Willow-Warblers, and Spotted Flycatchers about us at Exmouth on the 16th and 17th August, but they all disappeared before the 20th, on which day a heavy gale from the south, south-west, and east reached us.

No immigration or emigration takes place in stormy (cyclonic) weather, but birds seem to leave at the last moment just before a gale comes on. There were great numbers of Swallows and House-Martins congregating close to the sea-shore at Exmouth on 10th October, 1891, and they got off during the night apparently, as a storm began from the S.E. the following morning, and although we continued to see both Swallows and Martins up to the first week in November, these were not in such numbers as before the storm.

Small birds depart from our south coast when the wind is east, north-east, or south-east.

The southern coast of the county forms a rendezvous for many birds before their departure for the south, and for a few days previous to taking flight across the sea great numbers of Wag-tails (Pied, Grey, and Yellow), Swallows, House-Martins, and Land-Rails, and, in a lesser degree, Willow-Warblers and some other summer birds, congregate on the south coast in the autumn. Swifts are seen travelling steadily in a south-westerly direction from Exmouth and other sea-coast localities.

When birds are met with far out at sea they are generally supposed to have been driven out of their course by storms. We,

however, think it is certain that many species (including Warblers and birds with low powers of flight) do not fear to cross salt water even for considerable distances. In some cases they are probably induced to do so to save time and space, but we fancy the reason is often that the temperature is higher over the ocean than over the land at the period of the autumnal migration, and by keeping out to sea they find a genial warmth in the air that must greatly help them to bear up on their long journey. We have ourselves seen Snow-Buntings in numbers steadily flying to the south-west in October (1859) hundreds of miles from American land in the latitude of Newfoundland, and in the same month in 1888, as mentioned by us in the 'Zoologist' for 1889 (p. 22), we saw many American Warblers and other birds migrating at a considerable distance (378 miles) from the coast off New York. Humming-Birds, Warblers, and various short-winged birds are known to visit Bermuda. We saw flocks of Sky-Larks and a Robin in the Bay of Biscay on October 27, 1861, and a Woodcock on the next day, scudding before a north-easterly breeze towards the S.W., going at a great pace, 236 miles S.E. of the Lizard in lat. $47^{\circ} 5' N.$, long. $9^{\circ} 14' W.$ * One of the most remarkable things that have been brought to light about the migration of birds is that in autumn Starlings and some other birds are seen still flying westwards from the western coasts of Ireland; and Starlings have been taken in large numbers on board vessels hundreds of miles out in the Atlantic, yet only one individual is known to have ever reached Greenland. All sorts of theories have been propounded to account for this apparently suicidal tendency. The Starling is one of the most intelligent of birds, and its enormous increase in Devonshire shows it is well able to take care of itself. We would suggest that the huge migratory flocks have the instinct to make their "westing" where the degrees of longitude are short, without going too far northwards, and by getting a good "offing" from the land before keeping away to the south, they are enabled to avoid the mountain ranges of Spain and the Peninsula, and to "fetch" the Azores, Madeira, and the north-west coast of Africa. The winds are

* In the 'Field' for January 16th, 1892, Mr. H. Bendelack Hewetson, of H.M.S. 'Orient,' states that at 10 A.M. on January 8th, while crossing the Bay of Biscay, a Woodcock was seen flying close to the ship in lat. $46^{\circ} 8' N.$, long. $7^{\circ} 15' W.$, wind fresh from N.E.

generally north-easterly at the period of their autumnal migration, and blow off-shore for some distance from the land, especially in the Bay of Biscay and the chops of the Channel. By keeping out to sea and getting beyond the influence of the off-shore winds, they would probably meet a north-west or west breeze to help them on their course to land again. Out at sea, too, the temperature is higher than near the land, as is very obvious to anyone crossing the Atlantic in winter. Warmth we consider is a great assistance to migrating birds by keeping up their strength. So far, therefore, from birds avoiding the sea, their main routes lie over it, as will be seen by our Maps.

It is much more difficult to trace the return routes of the birds that come to us in winter. Sky-Larks, which arrive in countless thousands in some years in the autumn and winter from the east, and keep on to the south-west if the weather is very severe, do not return again through Devonshire in the spring, and may perhaps find their way back across the plains of France to Holland, Germany, Russia, and Siberia, from whence they come to us.

Every autumn some birds not found in Cornwall visit the Scilly Islands. These islands lie in the way of migrating birds coming eastward from the Atlantic, northwards from Africa and South Europe, westwards from the Channel Islands and France, and southwards down the Irish and Bristol Channels. So they have a curious jumble of Western, Southern, Eastern, Northern, and also American forms in their avifauna in even a more marked degree than Devonshire.

The number of Accidental Visitors which during the last two or three decades has swollen the British List of Birds would greatly astonish the earlier ornithologists; but it is, we believe, in great measure due to an agency which has been created since their day. We attach due importance to the closer watch now kept at all likely places around our coasts at which strangers might be expected to appear, and to the greater number of gunners who are prepared to receive them, and can readily allow that in old times many a rare straggler may have come and gone unobserved; yet the additions we refer to are scarcely to be thus accounted for. We think that the great fleet of rapid merchant steamers has been largely made use of by weary birds while on their passage, and that, settling on the rigging to rest, they have, in a short time,

been carried hundreds of miles beyond their usual latitudes until, making the first available land, they have appeared as strangers upon our shores, and so have been added to our Ornis. We consider this "Aided Migration" a factor worthy to be taken into account in considering the present movements of birds to and from this kingdom.

LIST OF WORKS AND MAGAZINE ARTICLES, &c. ON DEVONSHIRE ORNITHOLOGY QUOTED AND REFERRED TO IN THIS WORK.

1. The Gentleman's Magazine. Edited by SYLVANUS URBAN. 1755-1796. Various Notices relating to Devonshire Ornithology. "Three Days' Excursion on Dartmoor," by Capt. LASKEY. Vol. lxxv. (1795), part 2, p. 910; vol. lxxvi. (1796), part 2, p. 279.
2. A History of Devonshire. By the Rev. RICHARD POLWHELE, of Polwhele, Cornwall. In 3 vols. Folio. Exeter and London, 1793-1806. Land-Birds and Water-Fowl: Vol. i. chap. vi. pp. 101-111.
3. Transactions of the Linnean Society. (Papers by Col. MONTAGU.) Vol. vii. 1804. "Observations on some species of British Quadrupeds, Birds, and Fishes," p. 274; Nesting of the Cirl Bunting, pp. 276-280. Vol. ix. 1808. Hen-Harrier and Ringtail, p. 182; Montagu's Harrier, p. 188; Nesting of the Dartford Warbler, p. 191; Occurrence of Little White Heron female in Devon, October 1805, p. 197; Glossy Ibis, September 1805; and Red-breasted Snipe [Bar-tailed Godwit], 1803, p. 198.
4. The Monthly Magazine, vol. xxvi. part ii. Dec. 1808. A List of the Quadrupeds, Birds, and Fishes of Cornwall and Devon. Svo. London, 1808. Birds, pp. 433-435, 527-529. Published anonymously, but must have been written by Mr. JAMES, of Manaccan.
5. Ornithologia Danmoniensis, a quarto work commenced in 1809 by Dr. ANDREW G. C. TUCKER, of Ashburton. Two parts only were published, containing an Introduction to the study of Ornithology, and plates illustrating the Sparrow-Hawk, Red-backed Shrike, and Wood-Lark, drawn by W. R. JORDAN.

6. A Guide to the Scenery in the neighbourhood of Ashburton, Devon. By the Rev. JOHN PIKE JONES, Curate of North Bovey. Exeter, 1823. A pamphlet containing a "List of some rare Land-Birds which have been discovered in the neighbourhood of Ashburton," communicated by Dr. TUCKER. A mere list of 43 names of birds, without notes.
7. Dartmoor; a descriptive Poem. By N. T. CARRINGTON. London, 1826. Lists of Birds and Insects supplied by ROBERT and CHARLES TUCKER, sons of Dr. TUCKER, of Ashburton, without notes.
8. Guide to the Watering Places. Part ii. The Natural History of the District [Torquay, Dawlish, Teignmouth, and inland to Dartmoor]. By WILLIAM TURTON, M.D., and J. F. KINGSTON. Teignmouth, 1830.
9. Transactions of the Plymouth Institution, 1830. Article ix. p. 289. "On the Ornithology of the South of Devon." By EDWARD MOORE, M.D., F.L.S., and Member of the Plymouth Institution, in a letter to the President.
10. Magazine of Natural History. Edited by EDWARD CHARLESWORTH. New Series. Vol. i. 1837. On the Birds of Devonshire. By Dr. E. MOORE. Accipitres, p. 113; Passerine Birds, p. 176; Climbing and Gallinaceous Birds, p. 227; Wading Birds, p. 319; Web-footed Birds, p. 360.
11. Legends, Superstitions, and Sketches of Devonshire, on the borders of the Tamar and the Tavy. By Mrs. BRAY (Mrs. STOTHARD). 1st ed. 3 vols. London, 1836. 2nd ed. in 2 vols. 1879.
12. The Naturalist.
 MESSRS. MAUND and HOLL resigned the editorship of this periodical, after six numbers had appeared, in 1837. Mr. NEVILLE WOOD then undertook it from 1837-39; but from 1851 to 1855 it was edited by BEVERLEY R. MORRIS, M.D., and contained communications relating to Devonshire Birds by JOHN GATCOMBE, J. BANKER, L. RUDD, W. TOMBS, W. F. BIRD, G. P. R. PULMAN, S. HANNAFORD, R. A. JULIAN, &c. From 1864-67 it was edited by C. P. HOBKIRK and G. T. PORRITT. Vol. iii. no. 48, 15th April, 1866, contains "Additions to Rowe's Catalogue of the Mammals, Birds, &c., of Devon," by G. F. MATHEW.
13. The Natural History of South Devon. By J. C. BELLAMY, Surgeon. Plymouth and London, 1839.

14. The Climate of the South of Devon. By THOS. SHAPTEK, M.D. 1st ed. 1842; 2nd ed. 1862. Contains some notes on birds.
15. A Perambulation of the Antient and Royal Forest of Dartmoor, and the Venville Precincts, or a Topographical Survey of the Antiquities and Scenery, with notices of the Natural History, Climate, and Agricultural capabilities, and a valuable collection of Antient Documents. By SAMUEL ROWE, A.M., Vicar of Crediton, Devon, and Member of the Plymouth Institution. 1st ed. Plymouth, 1848; 2nd ed. London, 1856. Contains Lists of Mammals, Birds, Reptiles, and Fishes, by EDWARD MOORE, M.D., F.L.S.
16. The Zoologist.
First Series, 1843-65; Second Series, 1866-76. Edited by EDWARD NEWMAN. Third Series, 1877-91. Edited by J. E. HARTING, F.L.S. Contains notices by a large number of Ornithologists on Devonshire Birds. Mr. GATCOMBE contributed a long series of "Ornithological Notes from Devon and Cornwall," from 1872 to 1887. We are indebted to the present editor, Mr. J. E. HARTING, for much kindly interest in our book.
17. Book of the Axe. By G. P. R. PULMAN. 1st ed. 1854; 2nd ed. 1875.
Contains some information respecting the birds of the district.
18. Annals and Magazine of Natural History, 1859.
Occurrence of Great Black-headed Gull. By F. W. L. ROSS.
Occurrence of Rufous Warbler. By G. R. GRAY.
19. The North Devon Handbook; being a Guide to the Topography and Archæology, and an Introduction to the Natural History of the District. Edited by Rev. GEORGE TUGWELL, Curate of Ilfracombe. Contains a List of 188 Species of Birds without remarks. No date. (1863?)
20. Transactions of the Plymouth Institution, 1862-63. Contains a 'Catalogue of the Mammals, Birds, Reptiles, and Amphibians indigenous to, or observed in, the County of Devon.' By J. BROOKING ROWE, F.L.S. This was reprinted and published in pamphlet form.
21. Transactions of the Devonshire Association for the Advancement of Science, Literature, and Art. 1862-1890.
Recent additions to the Fauna of Devon. By J. BROOKING ROWE. Vol. i, part ii. 1863, p. 51.
Birds of Lundy Island. By J. R. CHANTER and Rev. H. G. HEAVEN. Vol. iv. 1871, p. 553.

Transactions of the Devonshire Association &c. (*continued*).

Birds of Teignmouth. By W. R. HALL-JORDAN. Vol. vi. 1874, p. 709.

Birds of Devon. By E. PARFITT. Vol. viii. 1876, p. 245.

22. Besley's Handbooks of Devonshire.

Exeter. Contains a sketch of the 'Natural History of the Neighbourhood.' By W. S. M. D'URBAN. 1st ed. 1863; 2nd ed. 1871.

South Devon. Contains a sketch of the Natural History. 1875. By W. S. M. D'URBAN.

23. Kingsbridge and its Surroundings. By S. P. FOX. 1st ed. 1864; 2nd ed. 1874. Appendix C: List of Birds of the District, without notes or comments. By Mr. HENRY NICHOLLS. Also contains a List of Provincialisms and Devonshire names of Birds.

24. Reports and Transactions of the British Association.

Bath Meeting 1864; Exeter Meeting 1869.

25. Reports on the Migration of Birds in the Spring and Autumn, 1879-87.

By a Committee of the British Association. Those for the years 1886 and 1887 contain the most records from Devonshire Lighthouses.

26. Chagford Parish Magazine, 1866.

Contains some allusions to Birds by the late G. W. ORMEROD, F.G.S.

27. Summary of Occurrences of the Grey Phalarope in Great Britain during the autumn of 1866. By J. H. GURNEY, Jun. London, 1867.

28. The Birds of Devonshire. By WILLIAM E. H. PIDSLEY. Edited, with an Introduction and short Memoir of the late JOHN GATCOMBE, by H. A. MACPHERSON, M.A., M.B.O.U. With Map and Coloured Plate. London and Exeter, 1891.

COUNTY AVIFAUNAS CONSULTED.

1. The Birds of Norfolk. By HENRY STEVENSON, F.L.S., M.B.O.U. London and Norwich. Vol. i. 1866; vol. ii. 1870; vol. iii. continued by THOMAS SOUTHWELL, F.Z.S., M.B.O.U. 1890.
2. The Birds of Somerset. By CECIL SMITH, M.A., M.B.O.U. London, 1869.
3. The Birds of the West of Scotland. By ROBERT GRAY, M.B.O.U., formerly Secretary to the Natural History Society of Glasgow. Glasgow, 1871.

4. The Birds of Shetland, with Observations on their Habits, Migration, and occasional appearance. By the late HENRY L. SAXBY, M.D. Edited by his brother STEPHEN H. SAXBY, M.A. Edinburgh, 1874.
5. The Birds of Cornwall and the Scilly Islands. By EDWARD HEARLE RODD. Edited by J. E. HARTING. 1880.
6. A Handbook of the Vertebrate Fauna of Yorkshire. By WM. EAGLE CLARKE and WM. DENISON ROEBUCK. London, 1881.
7. Catalogue of the Birds of Suffolk. By CHURCHILL BABINGTON, D.D., V.P.R.S.L., F.L.S., &c., Rector of Cockfield, Suffolk. London, 1884-1886.
8. The Birds of Dorset. By J. C. MANSEL-PLEYDELL, B.A., F.L.S., F.G.S. London, 1888.

WORKS ON BRITISH ORNITHOLOGY CONSULTED.

1. British Zoology. By T. PENNANT. 1st ed. Imp. folio. London, 1766; 5th ed. in 4 vols. 1812.
2. General Synopsis of Birds and Supplements. By JOHN LATHAM. 1787-1801.
3. Ornithological Dictionary; or Alphabetical Synopsis of British Birds. By GEO. MONTAGU. 2 vols. 8vo. London, 1802. Supplement, Exeter, 1813.
A reprint from the original edition and supplement with additions was compiled and edited by EDWARD NEWMAN in 1866.
4. A History of British Birds. By WILLIAM MACGILLIVRAY. 5 vols. 8vo. London, 1837-1852.
5. A History of British Birds. By WILLIAM YARRELL, F.L.S., V.P.Z.S. 1st ed. 3 vols. 1837-1843 (1st & 2nd Supplements, 1845-56); 2nd ed. 1845, 3 vols.; 3rd ed. 1856, 3 vols.; 4th ed. 4 vols. 1872-85. Vols. i. & ii. edited by Prof. ALFRED NEWTON, 1871-82, and vols. iii. & iv. by HOWARD SAUNDERS, 1882-85.
6. A History of British Birds. By Rev. F. O. MORRIS. 6 vols. 1851-55.
7. The Birds of Great Britain. By JOHN GOULD, F.R.S. 5 vols. Imp. folio. 1862-1873.
8. A History of British Birds, with coloured illustrations of their eggs. By HENRY SEEBOHM. London, 1883-1885.

9. *The Ibis*. A Magazine of General Ornithology. London, 1859–1891.
Mr. A. G. MORE on the Distribution of Birds in Great Britain during the Nesting-season, in the vol. for 1865. Many other papers bearing upon British Birds.
10. Catalogue of British Birds in the Collection of the British Museum. By G. R. GRAY, F.L.S., F.Z.S. 1863.
11. A Handbook of British Birds. By J. E. HARTING, F.L.S., F.Z.S. London, 1872.
12. A List of British Birds. Compiled by a Committee of the British Ornithologists' Union. London, 1883.
13. An Illustrated Manual of British Birds. By HOWARD SAUNDERS, F.L.S., F.Z.S. London, 1889.

The Birds of Europe. By H. E. DRESSER, F.L.S., F.Z.S., &c. In 8 vols. London, 1871–1881. Our obligations to this magnificent work are very great.

The Birds of the North-west (America). By ELLIOTT COUES, Captain and Assistant-Surgeon U.S. Army. Washington, 1874.

Key to North American Birds. By ELLIOTT COUES, M.A., M.D., Ph.D. London, 1884.

Gleanings of Natural History. By GEORGE EDWARDS, F.R.S., F.S.A., Librarian to the Royal College of Physicians. London, 1758.

LIST OF AUTHORS QUOTED OR REFERRED TO IN THIS WORK, WITH THE ABBREVIATIONS EMPLOYED.

In order to save space and frequent repetitions only the initials of the following authorities are, as a rule, given, enclosed in parentheses, after the observations quoted from them.

(B. born; D. deceased; *v. v.* vivâ voce; *in litt.* in letters.)

O. V. A.—OLIVER V. APLIN, M.B.O.U., Bloxham, Oxon.

Notes in 'Zoologist,' principally on birds of North Devon.

R. B.—DR. ROBERT BATTERSBY, Torquay. D.

Notes in 'Zoologist,' 1847, on Black Redstart, &c.

- J. C. B.—J. C. BELLAMY, Surgeon, Plymouth. B. 1812; D. 1854.
 Author of the *Natural History of S. Devon*, published in 1839, and containing a List of, and much interesting information respecting, the Birds of the southern part of the county. The *List of Birds*, being compiled from Dr. Moore's Catalogues, contains many errors.
- B.—BOLITHO, a bird-stuffer of Plymouth. D. 1880.
 He kept a list of the specimens sent to him for preservation. This manuscript was in a very rough state, but a portion extending over the years between 1851 and 1872 was obtained by the late Mr. J. Gatcombe at the sale of Bolitho's effects, and was kindly lent to W. S. M. D'Urban for use in the work he projected.
- J. B.—JAMES BANKER, a mechanic of Plymouth. D.
 Notes in the 'Naturalist' (1853-1855) on Plymouth Birds.
- T. R. A. B.—T. R. ARCHER BRIGGS, F.L.S., Fursdon, Egg Buckland. D. 1891.
 Notes on Ornithology in 'Zoologist' and *Trans. Devon. Association*. Author of a 'Flora of Plymouth.' He made many notes on Birds, which his brother, Lieut.-Col. Briggs, has kindly placed in our hands.
- W. B.—WILLIAM BRODRICK, Little Hill, Chudleigh. B. 1814; D. 1888.
 An excellent ornithologist and artist, marvellously skilful as a taxidermist. Author of 'Falconry in the British Islands,' 1855, and 'Falconer's Friends,' 1865. For more than twenty years Mr. Brodrick furnished the authors with information on Devonshire Birds, *v. v.* and *in litt.*
 Many of his beautifully mounted specimens are deposited in the A. M. M. We have others in our collection (M. A. M.).
- W. W. B.—WILLIAM WENTWORTH BULLER, of Strete Raleigh, Whimple. D.
 An enthusiastic naturalist. Communicated much interesting information to W. S. M. D'Urban, both *v. v.* and *in litt.*, for many years.
- C. J. C. B.—Rev. C. J. COURTENAY BULTEEL, Rector of Kingston-cum-Holbeton. D. *circa* 1887.
 Mr. Bulteel shot seven Night-Herons at Flete, the residence of his brother, Mr. J. Bulteel, in May 1849. He formed an extensive collection, which was purchased by Mr. Richard Andrew, Solicitor, Modbury.

E. B.—EDWARD BURT, for twenty-eight years Curator of the Museum of the Torquay Natural History Society. B. 1809; D. April 30th, 1888.

Mr. Burt contributed many notes on the birds observed by him around Torbay to the earlier volumes of the 'Zoologist.' After having shot off one hand he mounted over three thousand specimens of mammals and birds. He was an extremely clever stuffer, and very neat in everything he did. We still possess many specimens of his work (M. A. M.).

J. R. C.—J. R. CHANTER, Fort Hill, Barnstaple.

A list of the Birds of Lundy Island is appended to his "History of Lundy Island," in the Trans. Devon. Assoc. vol. iv. 1871, compiled from information furnished by the Rev. H. G. Heaven.

G. B. C.—G. B. CORBIN, Ringwood, Hants.

Notes in the 'Zoologist,' 1877, on S. Devon birds.

R. C.—ROBERT CUMMING, St. David's Hill, Exeter.

An excellent ornithologist and taxidermist, to whom W. S. M. D'Urban is indebted for his kind assistance and much valuable information on the birds of the neighbourhood of Exeter, imparted during a long friendship of forty years. His beautiful collection of birds mounted by himself is in the A. M. M.

W. D'U.—WILLIAM S. M. D'URBAN, F.L.S., F.E.S. (late Curator of the Albert Memorial Museum, Exeter).

Notes on birds of Devon in 'Zoologist' from 1853. Author of lists of Birds in Besley's Handbooks of Exeter, S. Devon, and N. Devon.

E. A. S. E.—EDMUND ARTHUR SAVAGE ELLIOT, M.R.C.S., L.R.C.P., Kingsbridge.

An indefatigable collector and excellent observer of birds. Mr. Elliot has furnished the authors with an immense amount of valuable information concerning the birds of his rich district, and kindly placed all his note-books in W. S. M. D'Urban's hands for the purpose of this work.

W. E.—WILLIAM ELSE, Curator of the Museum of the Torquay Natural History Society.

A good taxidermist, with considerable experience of the birds in the Torbay district. He has furnished some useful information.

H. A. E.—HERBERT A. EVANS, United Service College, Westward Ho!

Notes in 'Zoologist' and *in litt.*

J. G.—JOHN GATCOMBE, of Stonehouse, Plymouth. B. 1819; D. April 28th, 1887.

The prince of modern Devonshire ornithologists.

From 1851 to 1855 he contributed notes on birds observed near Plymouth to the 'Naturalist,' and from 1855 up to his death to the 'Zoologist.' He was a constant correspondent with the authors for many years, and furnished a mass of copious notes for their information. He was not only an acute and excellent observer, but also a capital ornithological artist. He obtained many rare birds near Plymouth, and probably did more for the ornithology of the county than any other observer since the time of Montagu.

J. H. G.—JOHN HENRY GURNEY, Northrepps, Norwich. B. 1819; D. 1890.

This eminent ornithologist visited Devonshire for several seasons, and contributed notes to the 'Zoologist' for 1868, 1870, 1871, and 1872 on the birds of S. Devon.

J. H. G., JNR.—JOHN HENRY GURNEY, JNR., F.L.S., Keswick Hall, Norwich.

Notes in 'Zoologist' and *in litt.*

J. H.—REV. JOHN HELLINS, M.A., of Exeter. B. 1829; D. May 9th, 1887.

For twenty years Chaplain of the Devon County Gaol. Principally known for his contributions to Mr. Buckler's work on the Larvæ of British Lepidoptera, published by the Ray Society 1886-89. But he was a good ornithologist and assisted the authors with much useful information.

J. G. H.—JOSEPH G. HAMLING, The Close, Barnstaple.

Notes in the 'Zoologist' on North Devon Birds.

F. C. H.—F. C. HINGSTON, Lockyer Street, Plymouth.

Notes in 'Zoologist' and *in litt.*

W. S. H.—REV. WILLIAM STRONG HORE, M.A., F.L.S., Stoke, Devonport, and Vicar of Shebbear, N. Devon, residing at Barnstaple of late years. D. circa 1884.

Contributed many notices of Devonshire birds to the 'Zoologist' from 1845 to 1862. Mentioned by Yarrell (*B. Birds*, vol. iii. p. 67, 2nd edit.), also by Dr. E. Moore in Rowe's 'Perambulation of Dartmoor.'

A. VON H.—BARON A. VON HÜGEL, formerly of Torquay.

Contributed many notes on the birds of Torbay and its shores to the 'Zoologist,' second series.

W. R. H. J.—WILLIAM R. HALL-JORDAN, of Teignmouth, Solicitor.

An enthusiastic collector of birds, whose name appears as the *first*

contributor of observations on Devonshire ornithology in the first volume of the 'Zoologist' (1843, p. 39), recording the nesting of Crossbills at Ogwell near Newton Abbot in 1839, and he contributed a paper on the natural history of Teignmouth to the Trans. Devon. Assoc. for 1874, vol. vi. p. 707. He is one of a family of ornithologists, two of his brothers, R. C. R. Jordan and C. R. H. Jordan, having also contributed notes to the 'Zoologist.' His father was a zealous ornithological artist, and drew the illustrations for Dr. Tucker's 'Ornithologia Danmoniensis' in 1809, of which, however, only two parts were published.

C. F. H.—C. F. HINCHLIFF, of Worlington House, Instow, North Devon.

Notes in 'Zoologist,' and a list of birds observed within seven miles of Ilfracombe in the 'Field' for 1884.

T. J.—REV. THOS. JOINES, Rector of Bradstone. D.

Supplied information respecting mammals and birds of Dartmoor to Mrs. Bray, who inserted his letters dated 1832 in her 'Borders of the Tamar and the Tavy' (1st ed. 1836, p. 350; 2nd ed. 1879, p. 305).

R. A. J.—REV. R. A. JULIAN. D.

Son of Richard Julian, of Estover House, near Plymouth. Contributed many interesting notes to the 'Naturalist,' 1851-55.

Mr. Julian, who promised to become an excellent ornithologist, unfortunately died early in life. Both his father and himself possessed collections of British birds, which are now in the Museum of the Plymouth Institution.

G. M.—COL. GEORGE MONTAGU, of Kingsbridge. B. 1751; D. 1815.

This famous naturalist, though not a native of Devon, having been born in Wilts, is inseparably connected with the Natural History of Devonshire, in which county he resided for many years. A notebook in Col. Montagu's handwriting, kindly lent to W. S. M. D'U. by the late Rev. John Hellins, shows that he left Highgate on the 26th and arrived at Teignmouth on the 29th April 1796. He again came into Devonshire in 1798, and took up his residence at Knowle Cottage, half a mile from Kingsbridge, where he lived for the rest of his life, dying there on 20th June, 1815, in his 64th year. He made many important observations whilst resident at Knowle. His 'Ornithological Dictionary' was published in 1802, and a Supplement to it in 1813. A copy of the supplement with annotations in Montagu's own handwriting, now in the Library of the Linnæan Society, which W. S. M. D'U. had an opportunity of inspecting when in the possession of the late Rev. J. Hellins of Exeter (Executor of Col. Montagu's son,

Henry D'Orville), has furnished some information not hitherto published. Col. Montagu's Collection of British birds is still preserved in the Natural History Museum, S. Kensington.

G. F. M.—GERVASE F. MATHEW, Fleet Paymaster, R.N., F.L.S., F.Z.S., F.E.S., Lee House, Dovercourt, Essex.

Notes on Devonshire birds in the 'Naturalist,' 1866, and in the 'Zoologist.'

H. A. M.—REV. HUGH A. MACPHERSON, M.A., Carlisle.

Associated with Mr. W. E. H. Pidsley in 'Birds of Devonshire,' and author of numerous notes on the birds of Devonshire in the 'Zoologist.'

M. A. M.—REV. MURRAY A. MATHEW, M.A., F.L.S., M.B.O.U., Buckland Dinham, Frome, Somerset; formerly of Raleigh, Barnstaple, Devon.

Numerous notes on North Devon birds in the 'Zoologist' from 1856.

E. M.—EDWARD MOORE, M.D., F.L.S., of Plymouth. D. 1858.

Author of the first systematic Catalogue of Devonshire Birds. This paper, entitled "On the Ornithology of the South of Devon," was published in the 'Transactions of the Plymouth Institution' for 1830, and formed the foundation for the lists compiled by all subsequent writers on Devonshire ornithology. In 1837 he published an improved Catalogue in Loudon's 'Magazine of Natural History,' new series, vol. i., and in 1848 a List of Dartmoor birds in the Rev. Samuel Rowe's 'Perambulation of Dartmoor.' He possessed a collection of birds, which was sold and dispersed at his death.

A. N.—PROFESSOR ALFRED NEWTON, M.A., F.R.S., F.Z.S., F.L.S., Magdalene College, Cambridge.

This eminent ornithologist published some notes on Birds observed around Torbay in the 'Zoologist' for 1850 and 1851, and edited Vols. i. and ii. of the 4th edition of Yarrell's 'British Birds,' in which are many allusions to Devonshire birds.

H. N.—HENRY NICHOLLS, Roseland, Kingsbridge.

He commenced the pursuit of ornithology in 1833, and contributed notes on the rarer birds occurring in his neighbourhood to the 'Zoologist' from 1847 to 1865, and a List of the Birds to 'Kingsbridge and its Surroundings,' by Miss S. P. Fox (1st ed. 1864; 2nd ed. 1874, Appendix C). Mr. H. Nicholls has kindly furnished W. S. M. D'U. with MS. notes, which have been frequently quoted from.

Col. Montagu employed a person named Gibbs to stuff birds for him; and after him a legal gentleman named Nicholas Luscombe took up the pursuit and stuffed some specimens for Montagu. He was followed by his son, Nicholas Luscombe, Jnr. This last gentleman imparted the art to Mr. H. Nicholls when he was about sixteen years old, and he followed it as a business until 1865, when he gave it up to his brother, Mr. R. P. Nicholls, who furnished the authors with the above information. The father of the Messrs. Nicholls, an excellent sportsman, died in 1876.

R. P. N.—RICHARD PERROTT NICHOLLS, Fore Street, Kingsbridge.

A noted bird-stuffer and an excellent ornithologist. Has been much in America, and has a very extensive collection of North-American birds. He succeeded his brother in business as a taxidermist in 1865, and has contributed many notices of rare birds occurring near Kingsbridge to the 'Zoologist' since that date. He furnished the authors with much valuable information both *v. v.* and *in litt.*, and in the form of MS. notes.

E. P.—EDWARD PARFITT, Librarian, Devon and Exeter Institution, Exeter.

A very industrious naturalist, and compiler of Catalogues of Mammals, Birds, Fishes, Invertebrate Animals, and Plants of Devon, which he has published in the Trans. Devon. Association. His List of the Birds is in vol. viii. of that periodical.

W. E. H. P.—W. E. H. PIDSLEY, of Exeter.

Author of 'The Birds of Devonshire,' in conjunction with the Rev. Hugh Macpherson.

R. P.—REV. RICHARD POLWHELE, Vicar of Manaccan, Cornwall.

A native of Cornwall; born at Truro in 1760, and died there in 1838. He was curate of Littleham-cum-Exmouth at one time, and also of Kenton, where he resided for ten years and where he wrote most of his 'History of Devonshire.' He can hardly be considered an ornithologist, and the chapter he devotes to Devonshire birds in his History of the County, published in 1797 (vol. i. chap. vi. pp. 101-111, published *after* the second volume), was mainly compiled from information supplied by his friends, Mr. (afterwards Sir William) Elford of Bickham, Mr. Perring of Rockford, and Dr. Tripe of Ashburton.

T. L. P.—THE HON. THOMAS L. POWYS (now Lord Lilford, F.Z.S., F.L.S., &c., and President B.O.U.).

Notes on Devonshire birds in the 'Zoologist' (first series). Has afforded much valuable information to the Rev. M. A. Mathew.

C. P.—CHARLES PRIDEAUX, of Hatch Arundel, near Kingsbridge. D. 1869.

This gentleman was an indiscriminate collector of birds, purchasing any that struck his fancy from dealers. Some that he considered varieties he gave away to his friends, and some were sold, but the greater portion of his collection was given to the town of Kingsbridge and forms the Town Museum. He contributed a few notices of rare birds to the first series of the 'Zoologist;' but little reliance can be placed on his statements, as he obtained his information second-hand.

G. P. R. P.—G. P. R. PULMAN.

Author of 'Book of the Axe' (1st ed., 1854; 2nd ed., 1875). This work contains some notices of birds. He also contributed notes to the 'Naturalist,' 1851-55.

J. J. R.—J. J. READING, M.E.S., formerly of Plymouth.

A zealous and successful collector, but principally known as an entomologist. Some notes on Plymouth birds in the 'Zoologist' for 1863 are from his pen.

M. S. C. R.—REV. MARCUS S. C. RICKARDS, M.A., Twigworth Vicarage, Gloucestershire.

A most successful collector. Contributed numerous notices of rare North Devon birds to the 'Zoologist,' and to Rev. M. A. Mathew in *litt.*

E. H. R.—EDWARD HEARLE RODD, of Penzance, Cornwall. D. 1880.

Author of 'Birds of Cornwall,' edited by J. E. Harting, published in 1880, and notes in the 'Zoologist,' 1854.

H. E. R.—HERBERT EVELYN RAWSON, The Vicarage, Bromley Common, Kent.

Notice of Alpine Swift near Ilfracombe in 'Zoologist' for 1880.

F. W. L. R.—FRANCIS WILLIAM LOCKE ROSS, of Broadway House, Topsham. B. 1793; D. 1860.

A sportsman, collector of birds, and an artist. His manuscript 'Journals of Occurrences in Natural History,' 1836-44, and 'British Laridæ,' are in the library of the A. M. M., but are not of much scientific importance. His collection of mounted birds, principally from the estuary of the Exe, was presented by his executors to the Exeter Museum. Mr. Ross published a few notes in the earlier volumes of the 'Zoologist,' and recorded the occurrence of the Great Black-headed Gull in *Ann. & Mag. Nat. Hist.*, Dec. 1859, p. 467.

J. B. R.—J. BROOKING ROWE, F.L.S., Castle Barbican, Plympton, S. Devon.

Author of a Catalogue of the Mammals, Birds, Reptiles, and Amphibians indigenous to, or observed in, the County of Devon, published in Trans. Plymouth Institution, 1862-3.

A copy of this list annotated by the author was kindly placed in the hands of the Authors by Mr. J. E. Harting. Mr. Rowe possesses a collection of birds principally obtained in the neighbourhood of Plymouth.

R. S.—RALPH SANDERS, Banker, Port View, Heavitree, Exeter. D. 1888.

This gentleman had a great taste for ornithology, and many birds collected by him are in the A. M. M., of which Institution he was one of the originators and Hon. Treasurer for many years.

W. B. S.—WILLIAM BOWER SCOTT, of Chudleigh. B. 1807; D. 1884.

By profession a Solicitor. An enthusiastic fisherman and ornithologist. He possessed a collection of British Birds formed by L. Chaffey, a gamekeeper at Doddington Hall, Kent. The greater portion of this collection he left to the A. M. M. Mr. Scott was a good observer of birds, and frequently furnished W. S. M. D'U. with information.

W. R. S.—WILLIAM ROBSON SCOTT, Ph.D. B. 1811; D. 1877.

Head master of the West of England Institution for the Deaf and Dumb, Exeter, for thirty-six years (1841-77). Contributed notes on "Rare Birds near Exeter," and "On some of the Rarer Birds of Devonshire," to the 'Zoologist' for 1845 and 1849, and read a paper "On the Ring-Ouzel" to the British Association at the Bath Meeting in 1864, and one on a "Hybrid variety of *Perdix cinerea*" at the Exeter Meeting in 1869. Dr. Scott formed a small collection of birds mounted by himself, which he presented to the A. M. M., of which Institution he was one of the originators.

C. S.—CECIL SMITH, M.A., M.B.O.U., F.Z.S., of Lydeard House, Bishop's Lydeard, near Taunton. B. 1826; D. 1890.

An excellent ornithologist, and author of 'Birds of Somerset,' published in 1869. He also contributed many notes on birds to the 'Zoologist' between 1863 and 1889, many of which relate to Devonshire species. Mr. Smith frequently paid visits to Exmouth for the sake of shooting on the Exe estuary and the south coast of the county, and assisted W. S. M. D'Urban with numerous notes on the birds he observed there.

- H. S.—HENRY STEVENSON, F.L.S., Norwich. B. 1833; D. 1888.
 Author of 'Birds of Norfolk.' He visited Torquay in 1859, and communicated notes on Devonshire birds to the 'Zoologist' for 1860.
- W. T.—WILLIAM TOMBS, jun., Banker, formerly of Exeter.
 Contributed notes on the Birds of the neighbourhood of Exeter to the 'Naturalist,' 1851-55.
- W. V. T.—WALTER V. TOLL, of Strete, Dartmouth.
 Has a collection of local birds, and has contributed numerous notes to the 'Field.' His brother, Mr. H. Limbrey Toll, owns the upper part of Slapton Ley.
- T. & K.—WILLIAM TURTON, M.D., and J. F. KINGSTON. D.
 Dr. Turton, the well-known author of 'Conchylia Insularum Britannicarum,' published at Exeter in 1822, appears to have resided for some years in Devonshire. In conjunction with Mr. J. F. Kingston he contributed a List of Birds to a "Guide to the Watering-Places.—Part II. The Natural History of the District" [Torquay, Dawlish, Teignmouth, and inland to Dartmoor], published at Teignmouth in 1830.
- A. G. C. T.—ANDREW G. C. TUCKER, LL.D., of Ashburton. D.
 Author of 'Ornithologia Danmoniensis,' of which one or two parts only were published in 1809. It contains some engravings of birds from drawings by W. R. Jordan. He contributed a "List of some rare Land Birds which have been discovered in the neighbourhood of Ashburton," to J. P. Jones's 'Guide to the Scenery in the Neighbourhood of Ashburton,' a pamphlet published at Exeter in 1823. His sons Robert and Charles furnished a List of Dartmoor Birds to Carington's poem 'Dartmoor,' published in 1826. Dr. Tucker is frequently mentioned by Col. Montagu in his Orn. Diet., and appears to have made many important observations on Devonshire Birds.
- G. T.—REV. G. TUGWELL, Rector of Bathwick, Bath.
 Gives a list of 188 species of Birds without remarks in the 'North-Devon Handbook.'
- J. C. W.—J. C. WILCOCKS, formerly of Teignmouth and Plymouth, now of Shoreham.
 Well known as an authority on sea-fishing. He communicated much valuable information to W. S. M. D'U., *in litt.* and *v. v.*, on the Natural History of South Devon.
- The letters A. M. M. stand for the Albert Memorial Museum, Exeter.

LIST OF PAST WORKERS IN DEVONSHIRE ORNITHOLOGY
MENTIONED IN THE WORKS OF POLWHELE, MONTAGU,
MOORE, BELLAMY, YARRELL, &c.

ARCHER, ADDIS, of Leigham.

Mentioned by Dr. E. Moore. He had in his possession a White-tailed Eagle, taken alive at the Eddystone.

BASTARD, WILLIAM, of Oakhill, Slapton.

Obtained a specimen of the Rufous Warbler, which is now in the possession of his widow. He formed a small collection of birds, which contains several interesting specimens.

BARTLETT, G., F.S.A. A bookseller of Plymouth.

Mentioned by Dr. E. Moore, and by Bellamy, Nat. Hist. S. Devon, p. 226.

COMYNS, J., of Mount Pleasant, between Dawlish and Starcross.

An ornithologist frequently referred to by Montagu, Moore, and Bellamy. He possessed an extensive collection of birds, containing many rare species, which was dispersed between 1837 and 1848. He observed the Bearded Tit near Topsham.

DREW, —, of H.M. Dockyard, Devonport.

Mentioned by Dr. E. Moore as a collector.

ELFORD, Sir WILLIAM, F.R.S., Bickham, near Plymouth. B. circa 1748; D. November 30th, 1837.

Recorder of Plymouth, 1798–1833. M.P. for Plymouth, 1796–1802 and 1802–6. Created a Baronet in 1800. A correspondent of Polwhele's.

ELLIOT, JOHN, F.R.C.S. Lond. B. 1807; D. 1873.

His fine collection is mentioned at p. lviii.

GOSLING, T. E., of Leigham, near Plympton.

Often mentioned by Dr. Moore and Bellamy, and contributed drawings of several mammals to the latter's Nat. Hist. S. Devon. He was Moore's authority for the "Golden Eagle" nesting at the Dewerstone, and the finding a Great Auk at Lundy Island. He appears to have been the first to observe the Black Redstart and Blue-headed Wagtail at Plymouth. He met with the Purple and Night Herons, and possessed a Black-winged Stilt killed at Slapton Ley.

HOLDSWORTH, Rev. ROBERT H., Rector of Brixham.

An ornithologist often mentioned by Montagu. He also furnished much valuable information, in a series of letters containing notes on the Natural History of the Birds and Fishes of Devonshire, to Yarrell, who frequently alludes to him in his 'History of British Birds.' His great nephew, Mr. A. F. Holdsworth, J.P., C.C., of Widdicombe House and Torcross, possesses the family taste for ornithology and has a collection of birds.

ISEBELL, Dr. JOHN, of Stonehouse.

Possessed a collection of Birds mentioned by Dr. Moore.

JOLLEY, —, of Plymouth.

A friend of J. Gatcombe. Possessed a collection of Birds.

JULIAN, RICHARD, of Estover, near Plymouth.

Frequently mentioned by Dr. Moore and Bellamy. His son was a good ornithologist (see p. lxxviii).

LASKEY, Capt.

Contributed observations on Devonshire Birds to the 'Gentleman's Magazine' for 1795 and 1796.

LEACH, G., of Stoke, near Plymouth. D. October 26th, 1823, aged 75.

A solicitor at Plymouth. Mentioned by Dr. Moore. He made a collection of Dartmoor Animals, and presented it to the Devon and Cornwall Natural History Society at Plymouth.

LEACH, WILLIAM ELFORD, M.D., F.R.S., F.L.S., of Spitchwick, Dartmoor. D. August 25th, 1836, aged 46.

Son of the above G. Leach. This eminent naturalist resided for many years on Dartmoor. He died in Italy of cholera.

LUSCOMBE, NICHOLAS, of Kingsbridge.

This gentleman presented the specimen of the Buff-backed Heron (Little White Heron of the Orn. Diet.), killed by Mr. F. Cornish at Allington, to Montagu. He was by profession a lawyer, but he used to stuff birds for Col. Montagu, and his son, also a lawyer, inherited his father's taste for ornithology and his skill in mounting birds (R. P. N.).

MAGRATH, Sir GEORGE, M.D., of Plymouth.

Medical Superintendent of Dartmoor Prison, 1814-16. Possessed a collection of British Birds mentioned by Dr. E. Moore.

NEWTON, JOHN, of Millaton, near Bridestowe.

This gentleman, who is very often mentioned by Dr. Moore in

Rowe's 'Perambulation of Dartmoor,' is reported to have met with many rare birds, namely:—Golden Oriole, Parrot Crossbill?, Great Black Woodpecker?, Ptarmigan?, Red Grouse?, Great Bustard, Little Bustard, Little Crake, Little Egret, Little Bittern, &c. He appears to have had an extensive collection of birds, and some of his specimens are still in existence at Millaton.

PRIDEAUX, CHARLES, of Dodbrooke, Kingsbridge.

A zealous naturalist frequently mentioned by Montagu and Moore. He was a cousin of C. Prideaux of Hatch Arundel, whose collection is in the Town Hall at Kingsbridge.

PRIDEAUX, JOHN, of Plymouth.

PINCOMBE, J., of Devonport.

A well-known bird-stuffer and dealer in rare British Birds. Often mentioned by Moore, Bellamy, and Brooking-Rowe.

PERRING, —, of Rockford.

A correspondent of Polwhele's.

RUDD, L. (?).

A native of the North of England. He was a great sportsman, and used to visit Topsham in the autumn for the sake of the shooting about forty years ago. He killed many rare birds on the Exe, which he gave to James Truscott, a bird-stuffer in Exeter, and some found their way into the collections of the late Messrs. Ross and Byne. He sent a few notes to the 'Naturalist.'

TRIFE, Dr., of Ashburton.

Thus alluded to by Polwhele in his 'History of Devonshire':—
"An excellent naturalist, and an excellent man! He was communicative without vanity; generous without ostentation."

TRIFE, CORNELIUS, of Devonport.

Possessed a collection of Birds. Mentioned by Dr. Moore.

TUCKER, W., of Mount Pleasant between Starcross and Dawlish.

He is stated to have shot a Nutcracker at Washford Pyne Moor, near Tiverton, in 1829.

VAUGHAN, Rev. B. KERR, Rector of Aveton Gifford.

This gentleman is frequently mentioned by Col. Montagu, to whose notice he brought the nest of the Hen-Harrier, and thus enabled him to prove the specific identity of the Ring-tail and Hen-Harrier in June, 1805. He is supposed to have seen a great White Heron on the banks of the Avon. His collection contained some good birds,

such as the Rose-coloured Pastor, Osprey, Night-Heron, Ruff, &c., killed in the district. It was sold in March 1847, and many of the specimens were purchased by the late Mr. J. Elliot of Kingsbridge (see *ante*, p. lviii).

WHIPPLE, J., of Plymouth.

Possessed a collection of British Birds. Mentioned by Moore.

YONGE, James, M.D., of Puslinch, Newton Ferrers.

Mentioned by Polwhele.

LIST OF AUTHORITIES FOR THE PROVINCIAL NAMES OF BIRDS USED IN DEVONSHIRE QUOTED IN THE WORK.

POLWHELE. 'History of Devonshire.'

MONTAGU. 'Ornithological Dictionary.'

BELLAMY. 'Natural History of South Devon.'

E. MOORE. 'Trans. Plymouth Inst.' 1830.

F. W. L. ROSS. In MS. 'Journals of Occurrences.'

Miss S. P. FOX. In 'Kingsbridge and its Surroundings.'

Rev. T. JONES. In Bray's 'Tamar and Tavy.'

Rev. CHARLES SWAINSON. In 'Provincial Names and Folk-Lore of British Birds.'

'Zoologist,' 1854, p. 4255, E. H. RODD; 1859, p. 6330, M. A. MATHEW; 1878, p. 222, G. C. LITTLE, p. 333, T. CORNISH.

Transactions of the Devonshire Association, vol. vi. p. 601; vii. p. 401; viii. p. 565; xvi. p. 86. W. PENGELLY, J. DYMOND, and Miss Fox.

Also verbal information and *in litt.* from W. CROSSING, Miss DOBBIE, Miss MARY METCALF, J. MAXWELL, and E. A. S. ELLIOT.

THE
BIRDS OF DEVON.

Order PASSERES.

Family **TURDIDÆ.**

Subfamily *TURDINÆ.*

THE THRUSHES.

To the Thrush family, with which we commence, because of their high specialization, belong our well-known garden favourites the Song-Thrush, the Blackbird, and the Mistle-Thrush, chief leaders of the spring choir of birds. Of these the Mistle-Thrush is the first in the year to pour forth his welcome song, as he seems to challenge the winter and to call loudly for the spring. The Redwings and the Fieldfares, winter visitors from the North, only enter our gardens in severe frost; as long as the weather is mild and open they are dispersed over our parks and meadows, where they may be sometimes seen congregated on the taller trees; they leave us before they fully open their summer song, and contribute nothing to the bird-music of our woodlands and shrubberies. Of the Ring-Ouzel, a summer visitor to our moorlands, nothing is to be said in connection with song, as it possesses only a few

harsh notes. All the Thrushes suffer much in hard winters; after the memorable one of 1880 there were districts in which no Song-Thrush was heard in the following spring.

The British Thrushes are well represented in Devonshire. On the edges of Dartmoor, in early autumn, six of them may be seen in the course of a morning's walk. Thrushes, Blackbirds, and Mistle-Thrushes will be plentiful; Fieldfares and Redwings will have just arrived, and one or two late-staying Ring-Ouzels will be met with in the hedges. White's Thrush, a rare straggler from Eastern Asia, has also occurred on the borders of the moor.

Mistle-Thrush. *Turdus viscivorus*, Linn.

[Holm Screech, Home Screech, Storm-Cock: *Dev.*]

Resident and common throughout the county. Breeds.

Although when Col. Montagu wrote his 'Ornithological Dictionary' he had to record that this bird was by no means plentiful in England, and seemed to be less so in winter, it is now very common, and its increase must be considered as one of the results of the extirpation of raptorial birds, and of the greater protection afforded to wild birds in the nesting-season. The Mistle-Thrush begins to build at the end of March in the south of the county. The various broods flock together in July and August, and in the latter month we have noticed the arrival of immigrants from the north-east; but in the course of the autumn these flocks, which are especially numerous on Dartmoor and other high moorlands, disappear, evidently having left the county for the south. While they remain they are especially partial to land that has been burnt over.

During the winter months the Mistle-Thrush is a solitary bird, taking and keeping possession of some holly-bush, from which it drives off every other species of bird. It is probably from this habit that it derives its common Devonshire name of "Holm Screech," as the holly is locally called "Holm-tree," just as its more ordinary title in the English list is taken from the mistletoe, a plant of rare occurrence in this county.

In 1885, and for some few years previously, the Mistle-Thrush was very scarce near Plymouth (*J. G.*, *Zool.* 1885, p. 376), but it afterwards became numerous again. As it can live on holly-berries, which seem distasteful to other species of Thrush, and are only resorted to by them when all else fails, it generally endures severe weather better than they do, although in the cold spell at the end of 1890 it suffered severely and numbers perished.

White individuals have been seen (J. C. B., Nat. Hist. S. Devon, p. 302), and a buff-coloured specimen was killed near Plymouth, October 5th, 1875 (J. G., Zool. 1875, p. 4716).

Song-Thrush. *Turdus musicus*, Linn.

[Grey Drush, Grey-bird, Trossel, Throstle, Thirstle: *Dev.*]

Resident and generally distributed. Breeds.

It is usually common, but great numbers perish in cold and snowy winters, such as those of 1880-81 and 1890-91, and then for some years it continues comparatively scarce. There is a considerable immigration in September, when many appear near the sea-coast, and at that time Thrushes are also plentiful in every turnip-field, where, under the shade of the broad leaves, they have plenty of food, and are serviceable to the farmer in clearing off insect-pests and slugs. These migratory Thrushes have come both from the continent and from the northern parts of the kingdom, and as they leave us are replaced by other arrivals, so that the species continues in some abundance throughout the winter, and finding sufficient maintenance, even in severe weather, is seldom driven to such straits as the unfortunate Redwings and Fieldfares, whose habits are so different.

The Song-Thrush may well be claimed as the "Queen of Song" in the West Country, where the capricious Nightingale is but seldom heard; and there are many, ourselves among the number, who would be unwilling to admit that it was in any way surpassed by the smaller minstrel. It is also a most useful bird, doing good work in gardens in hunting out and devouring snails, and as it does but little injury to the fruit, deserves to be universally protected.

The late Mr. T. R. A. Briggs noticed that Thrushes (not Sparrows) tear the flowers of the crocus in pieces in early spring and devour small portions.

This species generally begins to build early in March; in 1878, however, nests had been commenced at the end of February near Exeter.

Mr. Robert Cumming, when walking on the downs at Babbacombe, came across the dried-up body of a Song-Thrush having a Slow-worm, also dead and dried-up, between its mandibles, and passing some distance downwards, as if it had been partially swallowed by the bird. It is probable that both Thrush and Slow-worm perished in the struggle. The specimen was presented to the A. M. M. just as it was found by Mr. Cumming.

In building their nests birds are often not unmindful of decoration. An instance of this was furnished by a Thrush whose nest we found in a heap of pea-sticks in a corner of our garden. Some fresh peach-blossoms were stuck on the outside of the nest, within which the bird was sitting on her eggs in conscious pride.

Dr. Edward Moore mentions a white variety, and another with a white spot occupying the back of the neck and shoulders (Trans. Plym. Inst.

1830, p. 301). A cream-coloured specimen was shot near South Molton in July or August 1883.

Redwing. *Turdus iliacus*, Linn.

[Windell, Windle, Winnel, Win'el, Windall, Winnard : *Dev.*]

A winter visitor, generally very abundant. A very large flight was seen near Plymouth, November 1st, 1871 (J. G. and G. F. M., Zool. 1872, p. 2920). The Redwing was, however, very scarce in the winter of 1879-80, and also in that of 1882-3. In the severe weather of 1885-86 and 1890-91 it was extremely abundant in the South Hams. It arrives from the middle of October to the beginning of November, and leaves about the middle or end of March. On warm and sunny days during March Redwings may be heard singing soft sweet notes from hedge-row elms. We are told that they are only doing what bird-fanciers term "recording," or softly practising their full song; but what we have often heard has amounted to more than this, and has been, we believe, the utmost effort of the bird, concerning whose summer warblings, when heard in their Scandinavian nesting-places, there is some difference of opinion, the bird by some being styled the "Swedish Nightingale," while others speak but disparagingly of its powers of song.

A buff-coloured individual was killed near Plymouth a few days before March 2nd, 1870, and was presented to the late Mr. Frederick Bond (J. G., MS. Notes). A specimen entirely of a whitish colour, except the rufous under wing-coverts and axillaries, was picked up dead near Exeter, December 16th, 1878, and was seen by us in the flesh. It was, we believe, in the collection of the late Mr. Marsh-Dunn, of Teignmouth, who obtained it from the late Mr. Byne. Redwings are fond of roosting in spruce-fir trees. When feeding on pasture-lands their protective resemblance to dead leaves, blown about by the wind, is very remarkable. In protracted frosts they resort to woods and coverts, and are the first birds to perish from the cold.

Fieldfare. *Turdus pilaris*, Linn.

[Blue-bird, fylvare (*obs.*), Vole-Viers : *Dev.*]

A winter visitor, arriving in October and remaining till the end of March, and sometimes till April. Abundant in South Devon in some years and very scarce in others. Montagu says that in the winter of 1798 prodigious flocks appeared in the West of England, but as snow soon afterwards set in, thousands were picked up starved to death in Devonshire. Large flocks were seen near Plymouth on November 1st, 1871 (G. F. M., Zool. 1872, p. 2920): and Fieldfares were extremely plentiful there from January to March 1875 (Zool. 1875, pp. 4372, 4448). Great numbers were seen in and around Exeter at the end of December 1874, at the beginning of January 1875, and in December 1890 and in January

1891. They were very scarce in the South Hams in the winter of 1879-80, and in that of 1882-83 near Exeter.

On March 5th, 1890, after two days' hard frost, flocks of Fieldfares appeared on the meadows near Exmouth, though none had been seen there during the preceding winter. They remained for a week and then disappeared. On 21st December, 1890, vast numbers visited the South of Devon, and remained about Exeter and Exmouth till February 1891.

By the end of the second week in October the first Fieldfares are to be observed on Dartmoor, where they appear earlier than we have ever noticed them on the lowlands. They are then in large flocks and very wild, flying off chattering when one is still at a considerable distance from them. These birds have a strong game-seent; the setters would always begin feathering when they came across ground where Fieldfares had been recently feeding, and if the birds were still before them would come to a steady point. They remain on the moors until driven off by severe weather, when they visit the lowlands, and in deep snow swarm about town gardens in the south of the county.

In North Devon Fieldfares are always scarce, and some winters pass without one being seen. It is only in very severe weather that any are noticed. In the long and bitter winter of 1860-61 vast numbers of Fieldfares resorted to Lundy Island, where their starved and frozen bodies were lying on the ground in all directions. The rats, which infest the island in myriads, had a good time of it in picking the birds clean. We have often, in severe frosts, brought both Fieldfares and Redwings into the house, and putting them in a warm room and trying them with various kinds of food have done our best to restore them, but have never succeeded in keeping them alive for more than a few days. They never recover from the cruel frost-grip. In mid-April, before their departure for the north, Fieldfares assemble in flocks on the tops of tall trees and keep up a continuous twittering which may be heard at some distance. On January 25th, 1846, one was heard and seen singing at Honiton (E. Murch, *Zool.* 1846, p. 1297). We once saw Fieldfares in this country as late as the first week in May, and this, curiously enough, was in a London square.

A specimen with the plumage much mottled with white is in the A. M. M., probably shot near Topsham.

We once noticed a Fieldfare as early as September 4th, and are inclined to believe that it was a bird which had been slightly wounded, and so prevented from going north the previous spring. Mr. R. M. J. Teal mentions in the 'Field' for September 19th, 1891, having seen some at Newton Abbot on 17th of that month.

White's Thrush. *Turdus varius*, Pall.

An accidental visitor of extremely rare occurrence. An example was shot by Mr. E. Studdy in Dene Wood on the edge of Dartmoor, near Ashburton, January 11th, 1881. It was in company with three or four other birds, apparently of the same species, and, as in other instances of

the occurrence of this Thrush in England, was taken for a Woodcock when flushed (E. W. H. Holdsworth, Zool. 1881, p. 108).

This fine Thrush has occurred twice in Somersetshire, and once in Cornwall.

Blackbird. *Turdus merula*, Linn.

[Black Drush, Colly : *Dev.*]

Resident, generally distributed, and abundant. Breeds.

The disastrous increase, from a gardener's point of view, of the fruit-stealing Blackbird is due to the destruction by gamekeepers of his natural enemy the Sparrow-Hawk.

From his rich mellow flute-like notes we are disposed to rank the Blackbird as deservedly second to the Song-Thrush in his capacities for melody. We love to hear his music, which may be readily distinguished in the spring choir of birds, and, indeed, all his notes, so eloquent of the country, are dear to us. We are equally fond of his shrill twitter of alarm when he is suddenly surprised, and of the loud "chink, chink" with which he is wont to settle himself on his perch at dusk. This last cry is only the prelude to sleep, and is not the clamour of angry suspicion, although it sometimes may be this when some prowling cat is approaching his roost. The song of the Blackbird may be heard very early on a spring morning, as early as half-past two or three. This early morning song is the bird's best performance of the day. From the time when this watchful bird is eyeing the first tint of red spreading itself over the swelling strawberries at the end of May, until the mid-September sun is ripening the late peach or the tomato against the garden wall, nothing which calls itself fruit is safe from his attentions. We have watched him fluttering against the ripe plums and peaches on the trained trees against a warm south wall until he has dislodged one of the fruit, when he will either alight upon it to quaff its pleasant juices, or will fly off with it to some deep cover in the carrot-bed to eat it in concealment and at leisure. When the last plum or peach has been gathered in the garden the orchard will next attract him, and here he will be found in constant attendance as long as an apple remains on the trees, or there are any fallers littering the ground. The character of the Blackbird is well revealed to any one watching the various Thrushes feeding on the berries of a hawthorn bush in the autumn. While the Song-Thrush flies unsuspectingly direct to the tree, and begins to pluck the berries nearest at hand, and the Mistle-Thrush comes with a bold rush as if he were "monarch of all he surveyed," the Blackbird steals in from the side of the bush furthest from the spectator, and does not consider himself safe until he has plunged into the thickest part of it, where he hastily seizes a bunch and flies off hurriedly, and as secretly as he can, to some safe retreat to swallow his spoils unobserved. Nor will a Blackbird be often noticed feeding on the ground many feet away from the shelter of a hedge, whereas the Song- and Mistle-Thrushes come boldly out into the middle of the field.

During the winters of 1879-80 and 1880-81 many pied specimens were killed near Exeter. In some the heads were entirely white. Two pied specimens were shot at Plymouth in November 1881 (J. G., Zool. 1882, p. 66). We saw several living specimens with white heads in the grounds of St. Leonard's Rectory, Exeter, in August 1884, and some similar birds were killed at Exmouth in the winter of 1890-91. Dr. Edward Moore mentions two cream-coloured Blackbirds, one of which was shot at Warleigh (Trans. Plym. Inst. 1830, p. 300); and one was obtained at Plymouth on February 17th, 1870 (J. G., MS. Notes). Bellamy mentions that white specimens have occurred (N. Hist. S. D. p. 202). Mr. R. P. Nicholls received a very young albino specimen from Frogmore near Kingsbridge.

Blackbirds begin to build usually early in March, but some nested in 1878 at the end of February, near Exeter.

Ring-Ouzel. *Turdus torquatus*, Linn.

[Rock-Ouzel, Tor-Ouzel, Moor-Blackbird: *Dev.*]

A summer migrant, frequenting many of the rocky Tors of Dartmoor, *e. g.* Yes Tor, Vixen Tor, Greater and Lesser Lynx Tor, especially when the whortle-berries are ripe in July and August. Also Trowlesworthy Rabbit Warren, Shaughmoor, and Pyles on Harford Moor (R. A. J., 'Naturalist,' 1851, p. 86). It is, however, found on every portion of the moor, and is almost the only denizen of its dismal central swamps. It is very sensitive to cold winds, and is always found on the lee-side of a Tor. It arrives in South Devon at the end of March or the beginning of April. Towards the end of September the various broods on Dartmoor collect into little parties, and remain for a few days on its verges to feed on the hawthorn and other berries before taking their departure. Flocks appear in October for about a fortnight near Berry Head, the Bolt Headland, and the Start Point, and are seen no more that year (Rev. Robert Holdsworth, Yarrell's B. Birds, 2nd ed. p. 222). The Ring-Ouzel has been seen in the winter months on the South Coast (Zool. 1872, p. 2921, 1883, p. 296). According to the late Dr. W. R. Scott (Trans. Brit. Assoc. 1864) it breeds in June and July, but Mr. J. Gatecombe found two nests in Tavy Cleave, Dartmoor, on May 16th, 1868, with four eggs each, one set containing fully-formed young birds, and a nest on Dartmoor with three eggs on April 24th, 1871; and one with four eggs May 6th, 1872, in a tuft of heath near the side of the Avon (Zool. 1871, p. 2639, 1872, p. 3099). A nest and four eggs from Middle Common, West Anstey, near Dulverton, taken in May 1869, is in the A. M. M. On Dartmoor "the nest is frequently found in the side of a turf-tye, that is, a pit from which they dig turf for fuel" (T. J. Bray's 'Tamar and Tavy,' 1st ed. i. p. 348).

In North Devon the Ring-Ouzel arrives from the south at the beginning of April, and may then be met with in woods and coppices on its way to its moorland home. When it reaches its summer-quarters it selects the deep, heather-clad "cleaves" about the moors, and each of these will be found

occupied by a pair of these lively birds, which become clamorous on the appearance of a stranger, and will chatter at him, from a safe distance, their angry complaint. In the furze or heather on the side of these "cleaves" the nest is placed; often near to the tiny stream running down the bottom and never very far from the ground. The birds will frequently display their suspicion by accompanying the invader of their solitude some little distance, flying on in front of him, and settling for an instant on some stone or heather tump, from which they will seeld at him, and then flit on to another station. We have seen Ring-Ouzels in the summer-time venturing as low down as the gardens in Lynmouth. A few pairs frequent the Valley of Rocks, near Lynton. Ring-Ouzels are pretty numerous in the rocky ravines of Exmoor, and in the wild country near Dulverton, and also visit Lundy Island.

During the seasons of migration stragglers are occasionally seen in cultivated and wooded districts. The Ring-Ouzel frequently occurs at Plymouth in April and October (B., MS. Notes), and has also been observed at Kingsbridge (R. P. N.), Morehard Bishop (C. Ham), Silverton, Alphington near Exeter, Exmouth (C. S., Zool. 1874, p. 3831), and at Rousdon, near Axmouth.

A beautiful albino specimen was shot by Mr. F. R. Wolfe at Leighon Tor, in the parish of Manaton, October 9th, 1890, and is now in the Torquay Museum (W. E., and Geo. A. Musgrave, Zool. 1891, p. 116).

The ancient family of Oxenham, residing near South Tawton, on the northern borders of the forest, used always, so runs tradition, to be visited by a fatal bird "with a white crest," which, seen by one of its members, foretold his speedy death. It is said that a marble monumental stone, existing in 1632, had the following inscription:—"Here lies John Oxenham, a goodly young man, in whose chamber, as he was struggling with the pangs of death, a bird with a white crest was seen fluttering about his bed, and so vanished." Several others of the family are eurrently reported to have been visited when dying by a similar apparition. In the first chapter of 'Westward Ho!' we are told how Mr. Oxenham saw the white bird. Now it is not unlikely that one day a Ring-Ouzel flew into a sick chamber in the house, which was close to the moor; its white "crest" was a confused recollection of its white collar, and the superstition of those who saw it at a time of sickness regarded it as a tod-vögel, or harbinger of death.

THE CHATS.

The Wheatear, with the Chats, the Redstarts, the familiar Redbreast, and the tuneful Nightingale, most of them well-known birds, are all included with the Thrushes in the Subfamily Turdinæ, because, like them, their young have spotted plumage, and are unlike their parents. It is curious that of our two Redstarts one should be a

summer and the other a winter visitor. Some continental species, which as yet are unknown to the West Country, such as the Desert Wheatear, the Black-throated Wheatear, and the Isabelline Wheatear, having once or twice occurred in other parts of the kingdom, are now added to the British List.

Wheatear. *Saxicola œnanthe*, Linn.

[Chickell: *Dev.*]

A summer migrant. Breeds.

Common on some parts of the sea-coasts, as at Plymouth, near Kingsbridge, Exmouth, and near Axmouth in South Devon, and Morte Point in North Devon; on Dartmoor, and the other uncultivated parts of the county; and on fallow lands during the spring and autumn migrations; but it is less numerous during the breeding-season. Arrives at Plymouth about the middle of March, and leaves about the third week in October (J. G., Zool. 1877, p. 44). One was seen on Trowlesworthy Warren on February 19th, 1868, and one on Dartmoor on March 6th, 1872, by Mr. Gatcombe. At Exmouth and Dawlish Warren it is usually seen about April 1st. We have only once observed it as early as March 23rd. The males arrive first, and precede the females by a fortnight or three weeks.

“On the 24th March, 1804, a vast number of these birds, all males, made their first appearance on the south coast of Devon, near Kingsbridge” (Montagu, Orn. Dict., Suppl.). “Wheatears breed in greater abundance on Dartmoor than in any part of the West of England. They lose their breeding-plumage after July” (*id.* MS. Notes). Many breed in cavities of the rocks about Plymouth Sound (E. M., Mag. Nat. Hist. 1837, p. 176). A few pairs breed about the Bolt Head, and also at Thurlestone. In September 1877 Wheatears were unusually plentiful near the latter place (R. P. N. and E. A. S. E.). Numbers appeared on the coast at Plymouth on September 24th, 1883, after a strong gale from the north-east (J. G., Zool. 1884, p. 53). Wheatears were more plentiful in September 1874 than in the spring at Instow, N. Devon (G. F. M., Zool. 1874, p. 4252).

Examples of the larger race of Wheatear have been obtained at Exmouth, and in various other places in the county. The very smallest Wheatear we ever saw is an adult male in our possession which was sent us by Mr. E. Burt of Torquay. The large Wheatears are said to arrive some time later in the spring, quite a month after the smaller birds, and to perch on trees, in this differing from the ordinary race, which only alights on walls or mounds. Professor Newton informed us that the further north one goes the larger appear to be the Wheatears, the finest

he saw being those he observed in Greenland. We first made the acquaintance of the large Wheatears at Brighton, where the distinctions between them and the smaller race are well known to the local bird-catchers. All the Wheatears nesting along the North Devon and North Cornwall coasts are, as we have taken pains to observe, birds of the smaller race. From information supplied to us by Messrs. Pratt and Son, the well-known bird-stuffers of North Town Quadrant, Brighton, it would appear that the small Wheatears are not found in that neighbourhood during the summer, while the larger ones, which arrive in April and May, are often detected nesting close to the town. This seems opposed to the supposition that the large race belong to a northern form.

Our friend the late Mr. John Gatecombe wrote to inform us that a very pretty variety of this bird had been killed at Plymouth, of which he had made a drawing. It had a patch of pure white on the nape of the neck as large as that on the rump.

Whinchat. *Pratincola rubetra* (Linn.).

[Furze-Chat.]

A summer migrant, arriving about the middle or end of April and departing in October. Breeds.

It frequents pastures, heaths, and furze-brakes. Though not a numerous species in South Devon, it is met with on the borders of Dartmoor and near Plymouth (J. G., Zool. 1874, p. 4253); about the various Leys in the Kingsbridge district, and between Thurlestone Rock and Bantham, in which neighbourhood it was extraordinarily numerous on April 24th, 1891 (R. P. N. and E. A. S. E.); near Totnes (J. H. G., Zool. 1871, p. 2679); Teignmouth and Ashburton (T. and K.); Torquay; Woodbury Common and Exmouth; and at Axmouth, where Mr. Henry Swaysland, Jun., obtained examples on 24th April, 1883, just arrived. Bellamy says that Whinchats undoubtedly stay with us during the winter in rare cases (N. Hist. S. Devon, p. 225). One or two pairs annually breed near Cadworthy Bridge, or Shaughmoor, and on Harford Moor (R. A. J., 'Naturalist,' 1851, p. 87).

In North Devon the Whinchat is a rare bird, and, like several others of the Warblers, appears to be somewhat shy of the West Country. In the lists given of Lundy Island birds this species and the Stonechat have been probably confounded.

In a drive across North Somerset from east to west one day towards the end of April we were on the look-out for the Whinchat and other summer migrants, but in a distance of more than thirty miles we only detected three male Whinchats, although the country we passed through was very well adapted to the bird.

The Whinchat is rare and local in Cornwall, but is more plentiful in Dorset.

Stonechat. *Pratincola rubicola* (Linn.).

[Furze-Chat.]

Resident, common in some places. Breeds.

Frequents moors, heaths, and marsh-lands, and the cliffs of the sea-coasts. Often seen on the Haldons, on the borders of Dartmoor, and on other elevated tracts. Also at Plymouth, Kingsbridge, Teignmouth, Topsham, Exmouth, and Axmouth.

In North Devon we meet with this pretty little species almost everywhere, but it is nowhere plentiful, it being a very rare thing to see more than one pair in the same immediate neighbourhood. Year after year these little birds are faithful to the same station, and the nest is each season placed at no great distance from the site it occupied the summer before. In very severe weather in the winter the Stonechats disappear for a time, either migrating further south, or seeking more sheltered places in the vicinity of their usual resorts; but should it be an open season they do not wander very far from the localities in which they have passed the summer. We quite agree with Macgillivray in his remarks respecting the inappropriate English name borne by this bird, which is essentially a bush bird, and not, as its name might imply, confined to rocks and rocky places, so that the name he proposed for it—"Black-headed Bush-Chat"—seems to us more preferable. "Bramble-Chat" would perhaps be better than either.

Mr. Henry Nicholls has a fawn-coloured specimen in his fine collection shot near Kingsbridge in April 1863.

Redstart. *Ruticilla phœnicurus* (Linn.).[Fire-tail: *Dev.*]

A summer migrant, arriving from the 13th to 24th April, and departing at the end of September. Breeds.

Common in Northern and Eastern Devon, but scarce in the western and southern parts of the county.

Recent observers have reported the Redstart as "common" in North Devon, but in our time it was far from being so, and we only knew of one or two pairs in the district around Barnstaple with which we were acquainted. Young Redstarts, which very much resemble young Robins, are wont to seek their insect food in strange places. The interiors of cucumber and melon-frames are often visited by them when the lights are raised to admit air, and they are frequent visitors to greenhouses and conservatories, where they do good service by destroying insects.

The Redstart is an uncommon species in the neighbourhood of Plymouth (J. G., Zool. 1873, p. 3632; and R. A. J., Naturalist, 1851, p. 44). One or two pairs bred annually at Mount Edgecombe, and young were seen there until 20th September in 1849 (R. A. J., *op. cit.* p. 86). The late Mr. T. R. A. Briggs records seeing one on April 9th, 1887, at Fursdon,

near Egg Buckland. A Robin was fighting with it. Bolitho, the bird-stuffer at Plymouth, had only two specimens sent to him for preservation in the twenty years between 1853 and 1872. Col. Montagu, in the Supplement to his 'Ornithological Dictionary,' published in 1813, observes: "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 the 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." It is still of rather uncommon occurrence in the South Hams. One was shot, and others seen, in the parish of Thurlestone on April 24th, 1888, one or two were seen in April 1890, five at Bantham April 24th, 1891, and two near the top of Bolt Head September 11th, 1891 (E. A. S. E.). It has been known to breed in gardens in Kingsbridge (R. P. N.). We saw one at South Brent in September 1889. Observed April 17th, 1851, at Totnes (S. Hannaford, Jun., 'Naturalist,' 1851, p. 92). One seen 24th April, 1871, at Marldon, near Totnes (J. H. G., Zool. 1871, p. 2679). This is one of those species which are supposed to be extending their range westward. The Redstart has bred in the eastern part of Cornwall, but is as yet little known in that county.

Mr. C. Ham, of Exeter, informed us of a remarkable circumstance connected with this bird. About the 10th February, 1877, a thatcher named Bradford, engaged in removing the thatch from an old barn at Upton Pyne, near Exeter, found a nest and six eggs of a pale blue colour. A gamekeeper in the employ of the late Lord Idlesleigh happened to be present, and saw the nest and one of the old birds, which he recognized as a Redstart. He broke one of the eggs, and from the forward appearance of the young chick he considered it would have been hatched in a few days. The nest was placed on a winnowing machine, and was unfortunately accidentally destroyed. The cock bird was afterwards shot, but was lost in a hedge. We communicated these facts to Mr. Robert Cumming, of Exeter, an excellent ornithologist, who soon afterwards visited the spot and made enquiries, with the result that he had no doubt of the correctness of the foregoing account. (For a similar instance of winter nesting of the Redstart near Scarborough in December 1888, see Zool. 1889, p. 106.)

Black Redstart. *Ruticilla titys* (Scop.).

A winter visitor, arriving sometimes as early as the end of September and beginning of October, but generally about the first week of November, and remaining until the end of March and beginning of April. A male was killed at Plympton in July 1865 (J. B. R., MS. Notes). Frequently observed on the south-west coast of the county, especially near Plymouth, at Thurlestone, around Torbay, and at Teignmouth. East of the Exe it is much more rarely seen.

It is our opinion that the Black Redstart may be observed almost anywhere on our south-western coast in the winter months by those who





J. G. Keulemans del et lith.

Mintern Bros. Chromo lith

BLACK REDSTART.

Ruticilla titys (Scop).

Adult Male and Male in 2nd year. (R. caivii, so called).

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will take the trouble to search for it in suitable localities. It would appear to be more plentiful in the immediate neighbourhood of Plymouth than elsewhere, but this may be chiefly due to the fact that so good an observer was established there on the look out for it. It has occurred at many places on the southern shores of the Bristol Channel, where there have been ornithologists to recognize it, at Instow on the N. Devon coast, Ilfracombe, Minehead, and Weston-super-Mare. It does not confine itself to the neighbourhood of the coast, as it has been observed often inland, at Barnstaple, and many specimens have been obtained round Taunton. One frequented our house in Barnstaple one winter, and used to flutter before the windows, tapping the glass with its beak while catching small flies and midges, as the Common and Grey Wagtails will often do. When perched on the top of the house, or on some neighbouring wall, it had much the appearance of a Robin.

Among the numerous examples of the Black Redstart obtained by Mr. J. Gatcombe at Plymouth was one with its tail cut short and a piece of red worsted tied round its leg.

The habits of the Black Redstart have been well described by the Rev. W. S. Hore and Mr. J. Gatcombe, as studied by them in the vicinity of Plymouth. They are not easily procured, as they will creep into some hole or crevice in the rocks and remain concealed for a long time. On sunny days they may be observed busily engaged in the pursuit of small insects. Mr. Gatcombe says that they closely resemble the Wheatear in their actions, and seldom perch on a bush. A favourite haunt is not long without its Black Redstart, and should one be killed another soon takes its place. Old males are scarce and are very shy; but cold weather makes them very tame, and they may then be seen puffed out and hopping on the grass above the cliffs instead of on the rocks below.

The first specimen recorded from Devonshire, being the fifth British-killed example, was shot in January 1833 at Teignmouth (Yarrell's B. Birds, 2nd ed. i. p. 264). During the first week of November 1843 twenty were killed near Plymouth, on their arrival in small flocks, by various persons (W. S. H., Zool. p. 495). More than twenty were killed there in 1850, sixteen by one person (R. A. J., in 'Naturalist,' 1851, p. 44). Mr. J. Gatcombe killed thirteen there in November 1852, and he met with it every year for twenty years, except in 1880. Old males were scarce (Zool. 1881, p. 52, and *in litt.*). He states that it is most numerous at Plymouth in March, just before leaving for the summer. Very interesting notes on this species by that admirable and lamented ornithologist will be found in the 'Naturalist' (1851, p. 227), in the 'Zoologist' (1870, pp. 2026, 2139; 1873, pp. 3051, 3443; 1874, pp. 3827, 3909; 1876, p. 4784; 1877, p. 45; 1881, p. 52; 1883, p. 165; 1884, p. 55; 1885, p. 21; 1887, p. 378), and in Yarrell's 'British Birds' (4th ed. i. p. 336). Bellamy mentions this bird twice as "*Sylvia erithacus*, L., Red-tailed Warbler," and as "*Sylvia tithys*, Black Redstart." He states, on the authority of Mr. T. E. Gosling, that six "Red-tailed Warblers" were shot in the lines at Devonport at one time (Nat. Hist. S. Devon, 1839, p. 205).

In the Kingsbridge district Mr. R. P. Nicholls has met with this species, more particularly between Bantham and Thurlestone (especially in the winter of 1884), but he has also seen individuals on the house-tops and in the streets at Kingsbridge catching flies (MS. Notes). One shot at Fallapit on October 24th, 1887, and two seen at Thurlestone on November 7th, 1889 (E. A. S. E., MS. Notes).

Mr. E. Burt, formerly Curator of the Torquay Museum, says he had two or three specimens brought to him in most seasons (September to February) from Berry Head,

Goodrington Sands, Babbacombe, Watcombe, and Teignmouth (Zool. 1851, p. 3234); and had five which were shot in the winter of 1852-53 near Torquay (*op. cit.* p. 3807). Dr. Robert Battersby noticed three pairs in the winter of 1846-47 near there (*op. cit.* p. 1697). One occurred at Paignton in February 1870, and two adult males at Torquay in 1873 (*op. cit.* 1870, p. 2098, and 1874, p. 3907).

Messrs. R. and C. Jordan shot specimens at Teignmouth in January 1844, January 1850, January and February 1851, and January 1852 (Zool. 1844, p. 494; 1851, p. 3112; and Trans. Devon. Assoc. vi. p. 710). One occurred at Dawlish in 1867 (Zool. 1867, p. 703).

One was shot at Exmouth in December 1882 ('Field' for December 16th, 1882), and another in December 1889. We saw a young male there November 2nd, 1890. An adult male was obtained at Seaton on March 1st, 1883. It occurs occasionally near Exeter, where individuals were seen in 1874-75-76; and Bellamy states that it had been known to breed there (Nat. Hist. S. Devon, p. 206). One which we saw was taken alive, on a lined twig, by a bird-catcher, October 7th, 1882. This species has been seen at Barnstaple and Instow, but appears to be rare in North Devon (W. S. H., in 'Naturalist,' 1866, p. 358; M. A. M., Zool. 1867, p. 1017; and G. F. M., Zool. 1873, p. 2917).

Red-spotted Blue-throat. *Cyanecula suecica* (Linn.).

An accidental visitor of very rare occurrence. A Blue-throat was shot in a furze-brake, near Whimble, about eight miles from Exeter, about September 15th, 1852, by the late Mr. Wentworth W. Buller (T. L. P., Zool. 1852, p. 3709). One was seen by a lady in a garden on the Topsham Road near Exeter about 1869. The blue on the throat was distinctly noticed, and the bird identified at the time, by means of Gould's 'Birds of Great Britain,' as a *Cyanecula*. A doubtful occurrence is recorded from Devon by M. C. Cooke ('Naturalist,' vol. iii. 1853, p. 203). It is supposed to have occurred in the neighbouring counties of Cornwall, Dorset, and Somerset, but there is more or less doubt regarding nearly all of the reported occurrences in the south-western counties.

Mr. Cecil Smith mentions a young bird of the year, now in the A. M. M., said to have been shot in Somerset in 1856 ('B. of Somerset,' p. 84). It was formerly in the collection of Mr. Ross, of Topsham.

Note.—During the month of July 1877 our vicarage garden at Bishop's Lydeard, near Taunton, was tenanted by a Blue-throat. Our attention was first directed to it by the pugnacity displayed towards it by the Redstarts frequenting our grounds. One afternoon getting a close view of the stranger when it was perched on the roof of the conservatory we distinctly recognized its blue throat with a *patch of white* in the centre, proving it to be an example of *C. leucocyana*, the southern form of this warbler. We only saw this interesting little visitor on one subsequent occasion, and suppose it to have been either driven away by the jealous Redstarts, or to have fallen a victim to our garden cat. (M. A. M.)

Redbreast. *Erithacus rubecula* (Linn.).

[Robin, Redcock, Ruddock: *Dev.*]

Resident, generally distributed and abundant. Breeds.

Mr. Gatcombe noticed that Robins are very numerous on wild rocky parts of the sea-coast near Plymouth during the winter months (Zool.

1870, p. 2026). They sometimes nest very early in the year. A nest was found at Torquay, January 7th, 1869 (Zool. 1869, p. 1720). Several nests were seen near Exeter on February 15th, 1882. Albinos occur occasionally; one killed at Dunchideock, near Exeter, is in the A. M. M. A pure white nestling occurred at Plymouth in May 1883 (J. G., Zool. 1883, p. 420). In January 1866 a Robin with white wing-feathers was seen near Topsham. A buff-coloured specimen with the usual red breast was shot at Kingsbridge on December 3rd, 1886. (E. A. S. E.)

These pugnacious little birds will fight for some favourite position in the shrubbery, and the champion will drive away all intruders. Should any accident befall him, the place is occupied at once by another Robin, who, in his turn, holds it against all comers. In the hard winter of 1880-81, five Robins came into our house, self-invited guests, and continued with us for more than a fortnight, hopping about the dining-room floor at meal time and picking up crumbs. Several Blue Tits and Wrens found refuge in the passages, and a small flock of Chaffinches, Hedge-Sparrows, and Bullfinches were entertained in the kitchen until the thaw came. The household cat was, of course, suppressed for the occasion. (M. A. M.)

The late Mrs. Mitchell, of Newport House, Topsham, tamed a brood of Robins by feeding them in the nest, which was in a hedge near a garden path. They became so familiar that they would fly out of the hedge, as she walked up and down the path, and alight on her hand to feed on the finely chopped meat she daily carried out for them, and even take food from between her lips. Sometimes two or three at a time would perch on her hand. They would sometimes take food from other female members of the family. Some of this brood survived for a year or two, their number diminishing one by one, much to the regret of their old friend.

The heads of Robins are sometimes quite denuded of feathers, and remain so for several months, the birds in the meantime presenting a very amusing appearance.

Nightingale. *Daulias luscinia* (Linn.).

A summer migrant of occasional occurrence in the southern part of the county. Breeds occasionally.

Scarcely a season passes without one or more Nightingales being heard near Exeter in April, May, and June, and several have been trapped and shot in that neighbourhood from time to time. One specimen in the A. M. M., from the collection of the late Mr. F. W. L. Ross, of Topsham, was killed at Stokewood, near Exeter, in 1844. Mr. Ross mentions in his MS. 'Journal of Occurrences in Natural History' for 1844, p. 51, that Nightingales had been heard at Topsham, and both heard and seen at Stokewood, for twenty-seven years by one person. Mr. W. F. W. Bird states that Mr. Ross had said that he heard Nightingales repeatedly every year, and that he himself both heard and saw one singing in a tall elm on Northernhay, Exeter, April 16th, 1846 ('Naturalist,' 1851, p. 177).

Several were heard at Topsham in 1845 (Zool. p. 1191); one was shot at Tallaton, near Honiton, 1846 (Ed. Murch, Zool. 1846, p. 1393); one was trapped near Countess Weir about 1854; heard near Exeter and Topsham, April 28th and May 27th, 1864, and May 7th, 1865. Heard at Stokewood May 11th and June 1st, 1879 (R. C.), at Rewe, near Exeter, April 29th, 1881; at Stokewood June 5th, 1881, May 14th and 21st, 1883, May 13th, 1884, May 24th, 1886 (R. C.). At the end of April and in May 1882 Nightingales were heard singing at Torquay ('Field,' April 29th, 1882); at Kenton; two at once at Stokewood, May 27th and 28th (R. C.); at Chudleigh (W. B.); near Horrabridge and at Torcross (E. A. S. E.). Two were shot at Thurlestone April 24th, 1888 (R. P. N.). One is said to have been heard at Fenny Bridges, near Ottery St. Mary, in May 1890 ('Exeter Gazette' for May 23rd, 1890). In South Devon, besides the above localities, it is said to have been heard at Beer, Seaton, Exmouth, Powderham, Dawlish, Teignmouth, Lindridge, Ringmore, South Bovey, Brixham, and Kingsbridge (Polwhele, Hist. of Devon; Montagu, Orn. Dict., Suppl.; Bellamy, Nat. Hist. S. Devon; Turton and Kingston; and Yarrell's British Birds, 2nd ed. i. p. 303), to which may be added Ashburton, Shute Woods, and Gittisham (Pidsley's 'B. of Devonshire,' p. 15). At Kingsbridge it is so rare that Mr. R. P. Nicholls, of that town, and his brother had but one specimen brought to them for preservation in fifty years (E. A. S. E. in 'Exeter Gazette' for June 13th, 1883). It is also rare in the extreme south-eastern corner of Devon.

In North Devon it is said to have been heard at Barnstaple ('Naturalist,' 1866, p. 358); and many years ago a Mr. Torr had a stuffed Nightingale which was caught near Barnstaple. Polwhele also says it has been heard in that part of the county (Hist. of Devon).

Mr. J. T. Underhill informed us that a pair were breeding on the Honiton Road just beyond the Exeter and Exmouth railway arch, near Exeter, June 6th, 1872; and Mr. H. E. Rawson found several pairs breeding in a coppice near Ashburton in 1888 and 1889 (Pidsley's 'Birds of Devonshire,' p. 15).

Though the range of this species seems extending westward, it has not yet been recorded from any place west of the Tamar. Mr. Rodd says it is unknown in Cornwall ('Birds of Cornwall,' p. 39). It is common on the eastern side of Dorset, but rarer on the western (Mansel-Pleydell, 'Birds of Dorset,' p. 23). It is tolerably numerous near Taunton, in Somersetshire (C. S., 'Birds of Somerset,' p. 102).

We have never heard a Nightingale singing at large in N. Devon. Birds brought from other parts of the kingdom and turned down at Barnstaple did not remain in the district, and were never heard to sing. We ourselves once took a number of Nightingales from Surrey into Devon. We carried them down by the night mail in the guard's van, and in their cages the birds sang throughout the journey. Several of them lived for three years at Barnstaple, and treated us to rich concerts. They would begin to sing just at the early dawn of a summer's morning; first one would warble a few notes, and the others, in emulation, would tune up as well, until we had the full choir. During the middle of the day they were generally mute, nor did they sing much of evenings, with the exception of the winter time. They were then brought into the dining-room for the sake of the warmth of the fire, and when the lamps were lighted they often commenced to sing, and would provide us with a concert during dinner. Their favourite *bonne bouche* was a fat cockroach, and great was the excitement in all the cages of a morning when a pie-dish full of writhing monsters from the kitchen regions was brought into the room, and the birds were fed in turn by means of a quill-pen, with which the loathsome orthoptera were prodded and handed over to them, all uttering the "tack, tack," with which they express pleasure. (M. A. M.)

Subfamily *SYLVIINÆ*.

THE WARBLERS.

The Warblers are a numerous family, and include a large proportion of our smaller summer migrants. Many of them, although common, are not often seen, on account of their habit of plunging into the thickest part of a hedge, or among the dense herbage fringing streams and ponds, when they are approached; but any one who wishes to see them has only to stand quiet and watch, and presently the restless little birds will creep up again into view. Some of them, like the Blackcap, the Garden-Warbler, and the Reed-Warbler, are delightful songsters. The curious Grasshopper-Warbler is quite a ventriloquist: without changing its position it pours forth its strange song, now sounding close at hand, now seeming to come from a distance. The tiny Gold-crest confines itself almost exclusively to the fir, its favourite tree. The Willow-Warblers are ever on the move, searching the leaves for minute insects and insects' eggs. The aquatic Warblers seldom seem to sleep, singing sometimes all through the summer's night.

Whitethroat. *Sylvia cinerea* (Linn.).

[Whittybeard, White Drot, Nettle-creeper, Hay-sucker, Bee-bird: *Dev.*]

A summer migrant, common throughout the county in suitable localities, though Montagu seems to have found it rare in Devonshire. Breeds freely, often in gardens, which it much frequents.

The Whitethroat is one of the few Warblers which is commonly dispersed in the summer in the extreme west of England, and is numerous throughout both South and North Devon. Arriving with the rush of our small summer visitors about the middle of April, this lively and amusing Warbler is generally common, and must be well-known to everybody, as there is not a garden or hedgerow which is not enlivened by its presence. Now it may be seen balancing itself on the pea-sticks, when, with its crest erected, it will hurry through its few notes, and then restlessly pry about

for small insects, which it loves, and gardeners will say that it is not altogether innocent in the matter of helping the Sparrows in their attacks upon the peas, nor does it keep itself clear of the small fruit. Birds'-nesting boys know it as one of "the thin builders," from its loosely constructed nest, which, being often placed among nettles, gives the bird one of its provincial names, "the Nettle-creeper."

Near Exmouth numbers of Whitethroats are seen for a few days in August and then disappear.

Lesser Whitethroat. *Sylvia curruca* (Linn.).

A casual visitor of very rare occurrence.

Montagu says it had never been noticed in Devonshire when he wrote (Orn. Dict., Suppl. 1813). Dr. E. Moore says, "Rare, I have one specimen" (Mag. Nat. Hist. 1837). The Rev. R. A. Julian also observes that it is very rare, and that one that had been shot at Mutley was the only one he could discover as having been ever obtained near Plymouth ('Naturalist,' 1851, p. 87). A specimen killed in Devonshire was in the collection of the late Major Godfrey, of Exeter, which is now in the Bath Museum. (R. C.)

The record of its occurrence and breeding in North Devon in the 'Naturalist' for 1866, p. 358, is erroneous (M. A. M., Zool. 1891, p. 273). It is stated to have bred near Dawlish and Tiverton (Zool. 1891, p. 309), but we think in error.

We have never seen the Lesser Whitethroat in North Devon, nor, indeed, in any part of the county. Mr. J. Gatcombe wrote that he had never satisfied himself that he had ever seen it in South Devon. It is very rare throughout Somersetshire until one arrives at the eastern parts of the county bordering on Wilts, and even then it is very far from being numerous. We never met with it in the neighbourhood of Weston-super-Mare. In some MS. notes of a driving-tour made by Col. Montagu in our possession, there is the account of his seeing a single specimen of this little Warbler on the beach at Minthead, and he expresses his pleasure at meeting it for the first time so far to the west. (M. A. M.)

It is unknown in Cornwall, though it is occasionally obtained on the Scilly Islands during the autumn migration. It has bred in Dorset, but is rare in the western part of that county.

Black-headed Warbler. *Sylvia melanocephala* (Gm.).

It appears not improbable that one or more species of Black-headed Warbler occasionally visit England beside the Orphean Warbler, as when seen they would most likely be passed over as Blackcaps.

On the 16th April, 1890, whilst watching a male Blackcap which had just arrived, and was feeding on ivy-berries in our garden at Exmouth, another bird with a jet-black head, but *pure white throat* and underparts, and with a slender beak, longer and larger in proportion than in the Blackcap, settled on a twig quite close to it, and we were able to compare

the two birds. The stranger was certainly smaller than the Blackcap, instead of being larger, as the Orphean Warbler is said to be, and which we supposed it to be, as no other Black-headed Warbler was known to visit England besides those two species (W. D'U., Zool. 1890, p. 467). Mr. Howard Saunders, however, considers it was a Black-headed Warbler (*Sylvia melanocephala*), a common species in the south of France and the Peninsula, as well as other parts of the South of Europe, and which he thinks might be easily swept up with the tide of migration during a gale to our western shores (Zool. 1891, p. 272).

Blackcap. *Sylvia atricapilla* (Linn.).

A summer migrant, generally distributed and common. Breeds.

From our own observations it arrives from 16th to 24th April near Exmouth and Exeter, and feeds on the ripe berries of the ivy at that time. It not unfrequently remains throughout the winter. One was heard singing near Topsham on Jan. 20th, 1856, and one was seen near Exeter on Feb. 11th, 1869 (E. P., Trans. Devon. Assoc. vol. viii. p. 246). The late Mr. W. Brodrick heard it in March 1882 at Chudleigh, and Mr. Parfitt says he saw one annually at Exeter from 23rd to 30th March for many years (*op. cit.* p. 265). The late Mr. G. Treffry informed us that for several years he observed that the males appeared on 18th April in his garden at St. David's Hill, Exeter. The females were always eight or ten days later. In his MS. 'Occurrences in Nat. Hist.' (vol. ii. p. 7), the late Mr. Ross remarks having seen *a pair* on April 10th, 1839, and that several had been seen for the *first* time in his neighbourhood in that year. He observes it was very destructive to small fruits, such as green currants, gooseberries, cherries, and in fact everything. It is sometimes seen in the first week in April at Plymouth and Torquay ('Naturalist,' 1851, pp. 86, 204, and Zool. 1872, p. 279). Dr. E. Moore says, "Arrives in April and departs in September; is not uncommon; frequents woods and gardens" (Trans. Plymouth Inst. 1830, p. 303). Bellamy observes that "the Blackcap arrives here [Plymouth] with tolerable regularity about the last week in April, and often earlier" (Nat. Hist. S. Devon, p. 401). Mr. Henry Nicholls writes, "I caught a female specimen of this species in the greenhouse at Roseland, Kingsbridge, on the 12th Nov., 1886. After examining it I gave it liberty, and, to my surprise, on the following day I found it there again, attracted, no doubt, by some grapes which were hanging on the vine, as I found many of the berries perforated. It continued to roost there till December 10th, when on that day it flew away during a heavy fall of snow and hail, and did not return" (MS. Notes). A male Blackcap was shot on Dec. 12th, 1890, while feeding on some honeysuckle berries in a garden at Barnstaple (Zool. 1891, p. 62). Mr. E. A. S. Elliot, of Kingsbridge, says: "On April 26th, 1881, I found a Blackcap's nest with three eggs in our garden, which I took; on the 28th they began building another nest in some ivy close by, which was finished and lined by the 2nd May; the following day it contained one egg, and one was laid

daily till 6th May. This nest I again took. On the 27th May, in a privet-bush close to the original spot, I found a nest containing three young ready to fly" (MS. Notes).

The Blackcap is generally common in North Devon. This favourite of the garden and the grove, the least shy of all the Warblers visiting us in summer, first makes its appearance early in April, and, as if to make up for the slight put upon the West Country by several of the summer songsters, is occasionally to be found passing the winter in the south of Devon and in the south-west corner of Cornwall. It is possible to have a very near enjoyment of the delicious trills of this charming minstrel, for we have only to approach quietly the bush from whence it is warbling, either in the shrubbery or some woodland lane, and the little black-capped bird will take no notice, and often have we stood a few inches beneath his bough watching his throat quiver and swell as he poured forth his liquid notes in his full delight in life and "the incense-gathering spring." He is very fond of ripe green figs, and stealing quietly towards an old tree which used to grow against our stable-wall in North Devon, we have caught a couple of mice and a cock Blackcap in close company regaling themselves upon this delicious fruit.

The Blackcap, the Garden Warbler, and the Greater Whitethroat are all fruit-eaters, bringing their young broods into our gardens as soon as they can fly to take their share in the luscious food.

Garden Warbler. *Sylvia hortensis*, Bechst.

A summer migrant, numerous in some localities. The nest is frequently found near Exeter in May. Arrives in April, and sometimes remains with us up to October. We saw one at Exmouth, October 10th, 1890. (W. D'U.)

It is common in the valley of the Plym, being very plentiful in Bickleigh Vale on June 18th, 1875 (E. M., Mag. Nat. Hist. 1837, p. 176; R. A. J., 'Naturalist,' 1851, p. 68; J. G., 'Zoologist,' 1875, p. 4636). We met with it on Brent Hill in September 1889. "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" (Montagu, Orn. Dict.). Strange to say, Mr. R. P. Nicholls has never met with it at Kingsbridge. It is enumerated by the Rev. G. Tugwell in his list of North Devon birds, but although we have for many years closely looked for this Warbler, we have but very rarely seen it in the northern part of the county or succeeded in identifying its song.

Dartford Warbler. *Melizophilus undatus* (Bodd.).

Formerly resident in the south-eastern, southern, and south-western parts of the county. There have been no recorded occurrences since 1877, and we fear it must be extinct in Devonshire.

The breeding-habits of this species were first observed by Col. Montagu in this county. He first met with it in the southern parts of Devon on September 8th, 1802, when several were seen. He found nests, eggs, and young on a large furze common near Kingsbridge, July 16, 1806 (*cf.* Trans. Linn. Soc. vii. pp. 260, 274, and ix. p. 191). Neither Mr. E. A. S. Elliot nor Mr. R. P. Nicholls has been able to find it in that neighbourhood (MS. Notes). 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 Col. Montagu for examination (Orn. Dict., Suppl.). Turton and Kingston (1830) state that it was frequent on the borders of Haldou, and had also been noticed near Dawlish. Specimens used to be found in the furze-bushes of Mount Batten almost every year (J. G., Zool. 1878, p. 54).

It has been observed on Bovey Heathfield (W. B.); near Ashburton (A. G. C. T.); near Chudleigh (W. B. Scott); on Dartmoor (J. B. R.); frequently at and near Plymouth (E. M., R. A. J., and J. G.); Budleigh-Salterton, June 10th, 1871 (H. S. Percival, *vide* E. P.); Branscombe (J. G.); Lyme Regis (J. G., J. H. G., Jr., Zool. 1869, p. 1599; and Capt. Marder, *v. v.*). Two specimens were brought to us in the flesh which had been shot near Lympstone, January 14th, 1874. One was taken by a limed twig at Bovisand on November 7th, 1874 (Zool. 1875, p. 4370). Two were seen on Mount Batten, Plymouth, November 1st, 1877 (Zool. 1878, p. 54).

In Pidsley's 'Birds of Devon' it is stated that "Mr. Mitchell reports he has met with the species in the north of the county" (p. 17).

This is another species which has spread to the extreme south-west, and although formerly a rare bird in Cornwall, it had become not uncommon in the Laud's-End district by 1869. (Rodd, 'Birds of Cornwall.')

It is likely that a great number of these little birds perished in the severe snow-storms of the memorable winter of 1880-81. Although we were continually looking after the Dartford Warblers in the furze-brakes of North Devon, we were never successful in meeting with any. In its actions and appearance not a little resembling the Long-tailed Titmouse, which it does not very greatly exceed in size, this tiny frequenter of the furze used to be local, but by no means scarce, in many places on the south coast of Devonshire and Cornwall, and in the latter county Mr. E. H. Rodd informed us (in 1877) that it was yearly becoming more numerous. The first place where Colonel Montagu observed the Dartford Warbler was in the neighbourhood of Falmouth, where, in September 1796, he states that he found many on some fuzzy hills, and noticed them on the same spot until 24th December, when, some heavy snow falling, they disappeared and were never seen again. The Dartford Warbler has been sometimes met with in turnip-fields. It is a feeble flier, and can be easily run down and caught.

Goldcrest. *Regulus cristatus* (Linn.).

[Tidley Goldfinch, *Dev.*]

Resident, generally distributed and common, especially in winter, when its numbers are recruited by immigration, commencing in October. Breeds, usually attaching its nest to a fir-branch.

This, the tiniest of our English birds, chiefly affects plantations of evergreens, especially firs and larches, among the foliage of which are to be found the minute insects that form its food. It is wonderful what myriads of small beetles and spiders and larvæ of lepidopterous insects harbour in fir-woods, as any one can prove who will simply open an umbrella, and inverting it, shake or beat one of the lowest branches over it, and will then note the minute creatures that will be seen swarming in the receptacle thus prepared for them. The Goldcrest is also often seen in orchards and gardens, where it searches the shrubberies like the Willow-Wren and Chiffchaff, carefully examining each leaf and twig, and will be then seen in company with Tree-creepers, Long-tailed Tits, and other members of the Titmouse family. A nest in our garden, which was placed in a spruce-fir adjoining a hollow sycamore, tenanted by a pair of Green Woodpeckers, was entirely lined, and partly constructed, of the small green feathers of these birds.

A pair of Goldcrests, of a cream-colour with the usual yellow crown, was in the collection of Mr. Luscombe, of Kingsbridge. A white specimen has been shot in Devon (J. C. B., N. Hist. S. D. p. 206).

Fire-crest. *Regulus ignicapillus* (Temm.).

A casual visitor of very rare occurrence.

One example is recorded as having been taken in Devonshire (A. N., 'Yarrell's B. Birds,' 4th ed. i. p. 457). This is probably the specimen mentioned by Dr. E. Moore as "at Pincombe's" (Rowe's Peramb. Dartmoor, p. 233). Two specimens of this bird are in the collection of Mr. Pincombe, said to have been obtained in a garden at Devonport (J. B. R., Trans. Plym. Inst. 1862-63). "A pair in my late father's collection shot near Plymouth. Mr. H. Nicholls has a pair obtained at the same time from Pincombe, of Plymouth" (E. A. S. E., MS. Notes). None of these occurrences are satisfactorily authenticated. All the specimens seem to have come from a well-known dealer in rare birds. A female occurred at Torquay March 6th, 1873 (J. H. G., Jnr., Zool. 1873, p. 3490; A. von H., Zool. 1874, p. 3907). According to Mr. F. Pershouse, Jnr., two specimens have been obtained at Torquay. One was picked up dead at Torre in 1874 (E. P., Trans. Devon. Assoc. viii. p. 266). A specimen in the collection of the late Mr. Cecil Smith is said to have been obtained at Torquay.

It is said to have occurred on Lundy Island (J. R. C., Trans. Devon. Assoc. iv. p. 605).

We were informed by the late Mr. Vingoe, of Penzance, that anyone searching for the Fire-crest in that neighbourhood is almost sure to meet with it throughout the late winter months in places where ivy abounds, in the shelter of which it will be seen hunting for its insect food. We never detected the Fire-crest in North Devon. Our friend Mr. J. Gatcombe looked upon several of the reported occurrences in South Devon as very doubtful, but there can be no question as to the genuineness of the example seen by Mr. J. H. Gurney in Mr. Shopland's possession at Torquay,

which was stated to be the only specimen Mr. Shopland had received during his long experience as a bird-stuffer in that town.

The Fire-crest occurs not unfrequently in Cornwall, especially in the Land's-End district, Lariggan Valley being a favourite locality, and in the Scilly Islands; also in Dorset.

Chiffchaff. *Phylloscopus rufus* (Bechst.).

[“Lesser Pettychaps” of Montagu; “Choice and Cheap” about Totnes.]

A summer migrant, generally distributed, and sometimes very numerous. Breeds.

Usually arrives about March 26th, departing in October; some, however, occasionally remain all through the winter. Col. Montagu saw a Chiffchaff several times in the winters of 1806-7 and 1808-9 in Devonshire (Orn. Dict., Suppl.). One was shot on January 20th, 1851, at Torquay (Zool. 1851, pp. 3033, 3034). Three were shot near Modbury about the end of December 1866 (R. P. N.). Mr. J. H. Gurney heard this bird at Torquay on February 14th, and again on March 10th, 1872. In that year we heard it at Chagford on March 9th (M. A. M., Zool. 1872, p. 3063), and Mr. Gatecombe noticed it at Plymouth on March 16th. It is very common at Plymouth, and Mr. T. R. Archer Briggs saw and heard one there on February 16th, 1875 (Zool. 1875, p. 4381). One was seen at Axminster on February 22nd, 1882 (‘Field’ for March 4th, 1882). We observed great numbers in a marsh near Topsham, March 21st, 1855, and March 18th, 1856, when snow was falling (Zool. 1856, p. 5093). In some years, however, as in 1883, it is scarce (W. D’U.).

The Chiffchaff is quite as common in North Devon as in the south of the county.

Willow-Warbler. *Phylloscopus trochilus* (Linn.).

[“Yellow Wren” of Montagu; Hay-bird, Ground Isaac, Ox-eye: *N. D.*]

A summer migrant, common and generally distributed. Breeds.

Arrives sometimes as early as the end of March or beginning of April, but more usually about the middle of the latter month, when the great rush takes place across the Channel. “Never saw anything like the numbers of Willow-Wrens seen during the week of 12th to 18th April, 1890” (E. A. S. E., MS. Notes). It sometimes remains until October on the south coast, but we think many leave before the end of August. There is a great influx of birds of the year to the neighbourhood of Exeter and Exmouth at the end of July and early in August. In August 1883 many entered the windows of houses in Exeter, and were brought to us for identification.

To be seen very early in the spring, when the sallows are first budding into leaf by the side of every brook, this tiny bird is associated in the mind

of the angler with the first days of the fly-fishing season, when the trout in our west-country streams rise keenly to the "blue upright," and have not been rendered hard to please by the abundant supply of insect food which will make them fat and lazy and disposed to be critical by the time the meadows are ready for the mower's scythe in the merrie month of June. On many a breezy day towards the end of March have we welcomed the Willow-Warbler as we have noted it for the first time for the season flitting with restless haste from twig to twig, scrutinizing each unfolding leaflet, and every now and then flying up a few inches into the air to capture some passing insect. Ever and again it will warble its simple song, not to be compared in its melody with that of the Blackcap, perhaps, but cheerful and sprightly, and dear to those who hear it as among the first strains which usher the glad spring. It is often seen in gardens, where it is a bold and fearless little bird, somewhat disposed to play the tyrant among the other small frequenters of the shrubberies.

Wood-Warbler. *Phylloscopus sibilatrix* (Bechst.).

A summer migrant. Local, but common where it occurs. Breeds.

The Wood-Wren times its arrival in England so as to find the oaks and elms already coming into leaf, and is not to be expected before the end of April or beginning of May, when it may be noticed in places far from the woods which are its summer abode. We have seen it on the level near Weston-super-Mare in Somerset. In North Devon it is not rare in large woods where there are tall oak and beech trees.

At Plymouth it arrives in April and departs in October. It is common in Bickleigh Vale and in all large woods with tall trees, but is very rarely seen in brush-wood (E. M., Trans. Plym. Inst. 1830, p. 305; J. C. B., Nat. Hist. S. Devon, p. 207; R. A. J., 'Naturalist,' i. p. 87; and J. G., v. v.). ? Ivybridge, Rev. G. C. Green; Tavistock, A. Mitchell (Pidsley's 'Birds of Devonshire'). It has not been met with near Kingsbridge (R. P. N.).

There is a specimen in the Museum of the Torquay Natural History Society obtained in the neighbourhood, and Turton and Kingston include it in their list of the birds of the district.

It is very scarce near Topsham, but one was shot there in July 1844 (F. W. L. R., MS. vol. iv. p. 119).

In North Devon it is common in oak-woods near Clovelly (O. V. A., Zool. 1887, p. 71). Apparently numerous near Dulverton, in Somerset, close to the north-eastern border of Devon (C. S., Zool. 1878, p. 339).

Col. Montagu saw and heard this species in several of the western counties, and obtained specimens, nests, and eggs (Trans. Linn. Soc. vol. iv. p. 35).

[Icterine Warbler. *Hypolais icterina* (Vieillot).

In Bellamy's 'Natural History of South Devon' there is a description given of a Warbler which was unknown to him, but which we have little doubt was a specimen of the Icterine Warbler, the bird which for some time had a place in the British list under the name of the Melodious Willow-Warbler. However, this appellation was misleading, because the





START POINT.

Icterine Warbler does not in its nesting-habits or song agree with the group of Willow-Warblers (*Phylloscopi*), which all build dome-shaped nests in banks or upon the ground, whereas the Icterine Warbler places a loosely constructed open nest upon the forked bough of a tree, and in its other habits comes nearer to the Sedge-Warblers. We quote Bellamy's account of the South-Devon specimen:—"Recently a bird has been shot by Pincombe, taxidermist of Devonport, at Whiteford, in the neighbourhood of Plymouth, which bears a great resemblance to the Chiffchaff in colour, and is but a trifle longer; the differences worthy of note being first and principally a greater width of the base of the upper mandible [one of the characteristics of C. L. Brehm's genus *Hypolais*]; secondly, a want of correspondence between certain quill-feathers, the second and seventh being the same length in the Chiffchaff, the second and sixth in the Yellow Wren (*Phylloscopus trochilus*, Linn.), while in this new species each feather differs in length from the rest; thirdly, that the alula spuria is of a brighter yellow, and somewhat larger. The note is unknown to the person who procured it." (N. H. S. Devon, p. 207.)

The song of the Icterine Warbler is remarkably fine. We often stood beneath one which spent a summer with us at Stone Hall, in Pembrokeshire, which we should never have distinguished from a somewhat large Chiffchaff had it not been for its delightful melody. The little songster danced up and down upon the branch, opening and closing its wings in its joy as it poured forth its notes, as we have also seen the Wood-Wren doing while singing in May in an oak. (M. A. M.)

Rufous Warbler. *Aëdon galactodes* (Temm.).

An accidental visitor from Southern Europe of very rare occurrence.

The same district of South Devon has afforded two instances of this Warbler. The first was shot near the Start by Mr. W. Dillwyn Llewellyn, of Penlegare, in September 1859, after a strong wind had been blowing for some time, and was so much injured that it could not be mounted. It had lost its tail and was very thin, and was presented to the British Museum, and is now scarcely to be recognized as a Rufous Warbler. The capture of this example was recorded by Mr. G. R. Gray in the 'Annals and Magazine of Natural History,' 3rd ser. iv. p. 399, and in 'The Ibis' for 1860, p. 103. The second instance occurred near Kingsbridge on the 12th of October, 1876. The bird was first noticed in a turnip-field by a gentleman out shooting (Mr. W. Bastard, of Slapton), who was attracted to it both by its colour and its strange antics. When flushed from the turnips it flew to a hedge, from which it made short flights into the air, descending each time with its tail expanded. We had the pleasure of examining this example shortly afterwards at Mr. Nicholls's house in Kingsbridge. It was in very good condition, and was evidently, from the crescentic markings upon the plumage, a young bird of the year. It is still in the possession of Mrs. Bastard (H. N., MS. Notes; R. P. N., in 'Field' for October 1876; and Zool. 1876, p. 5179). Only one other

example of the Rufous Warbler had previously occurred in this country, and this was in the neighbourhood of Brighton in September 1854. It must be a strange accident that brings a bird which is only a summer visitant to the south of Europe so far to the north as to be found on our coast in the autumn. Most probably these stragglers had become mixed up with some other party of birds, or else had been carried far out of their course by an adverse wind. It is stated that a strong south wind had been blowing for some time previous to the occurrence of the first Devonshire specimen of this Warbler.

THE AQUATIC WARBLERS.

We have now arrived at the Aquatic Warblers, a numerous family, of which there are but three species, all summer visitants, at all plentifully distributed in this country, and of these but one, the Sedge-Warbler, can be said to be common in Devonshire, or, indeed, in the S.W. counties. These Warblers are to be known by their short, rounded wings, their long and wedge-shaped tails, and by their strong legs and long prehensile toes and claws, adapted to their taking a firm hold of the reeds about which they climb most of the day in search of small insects. They all have a habit of singing by night, and their song consists of a quick hurried babbling, which seems to arise on all sides of one when near their favourite haunts of a summer evening. The West Country, with its rapid trout-streams flowing through moorlands, woods, and meadows, rarely fringed anywhere on their banks with the dense tangle of herbage these Warblers love to frequent, does not seem suited to their presence, and it is for this reason, with the one exception mentioned above, they are only rare stragglers within its confines. Slapton Ley, in South Devon, might seem a suitable locality for the Reed-Wren, and here it was, without doubt, detected one summer by Mr. J. H. Gurney, Sen., but its appearance was only accidental, and we cannot find that it has been observed there

since. We never detected it or its nest in North Devon. We think it quite probable that both Dr. Moore and Bellamy were mistaken in their identification of the bird, which we do not believe to occur in Devonshire, save only as an accidental straggler.

[As the Marsh-Warbler, *Acrocephalus palustris*, has been observed for many years in succession nesting around Taunton, and is, moreover, a species which does not require high reeds and sedge, it very probably visits Devonshire, although it has hitherto escaped detection.]

Reed-Warbler. *Acrocephalus streperus* (Vieill.).

A casual visitor in summer of rare occurrence.

Dr. Edward Moore mentions this species, in his "List of Devonshire Birds" (Trans. Plym. Inst. 1830, p. 303), as "very rare; seldom seen further west than Somersetshire; but is marked a Devon bird in Carington's 'Dartmoor.'" In his "List of Passerine Birds of Devonshire" (Mag. Nat. Hist. n. s. i. p. 176, 1837) he says, "Rare, I possess one specimen." If Turton and Kingston are to be trusted, it was found in the meadows near Newton and Ashburton. The late Mr. J. H. Gurney, under the heading "Ornithological Notes from South Devon," in the 'Zoologist' for 1871, p. 2679, says, "I saw this day (6th May) several Reed-Warblers at Slapton Ley, where I heard them frequently throughout the remainder of the month."

It is a rare and local species in Cornwall (Rodd); only known from the neighbourhood of Bridgwater and Bath in Somerset (C. S.); and a summer migrant to Dorset (Mansel-Pleydell).

[Under the name *Sylvia turdoides*, Meyer (Thrush Nightingale), Rev. F. O. Morris, in his 'British Birds' (vol. iii. p. 207), says: "N. Rowe, Esq., of Worcester College, Oxford, has informed me that two eggs of this rare British bird were taken at Staddiscombe, near Plymouth, in Devonshire, in 1850." The species intended was probably *Acrocephalus turdoides*, Meyer (Great Reed-Warbler), and not *Philomela turdoides*, Blyth (Thrush Nightingale), a species which has not occurred in England (*vide* Newton, 'Yarrell's B. Birds,' i. p. 320, note). The Great Reed-Warbler is, however, not known to have occurred in the West of England. Its eggs are so characteristic that there ought to be no mistake in their identification.]

Sedge-Warbler. *Acrocephalus phragmitis* (Bechst.).

A summer migrant, generally distributed in suitable localities, such as river-banks, marshes, and ponds. It is plentiful and breeds.

Arriving about the middle of April, and departing again at Michaelmas, this vivacious and noisy little bird betakes itself to sedgy and swampy ground, to the banks of streams and rivers, and to damp hedge-rows and withy beds, where it plunges deep into the cover of the aquatic plants and bushes, and all through the day and night pours forth an incessant babbling—at one moment mimicking the notes of some other bird; at another scolding to itself with a deep “churr”; restless and never still, seldom coming forth into view, and nesting upon the ground or in some low bush: its eggs partake the same variable character as its song.

Mr. Gatcombe saw some at Plymouth on October 1st, 1875 (Zool. 1875, p. 4716).

The Sedge-Warbler is common in the South Hams. Often flushed in turnips in September (E. A. S. E.). Efford Marsh, Buckland meadows, and the banks of the Erme below Ermington (R. A. J., ‘Naturalist,’ i. p. 87); Kingsbridge (R. P. N.); and Slapton Ley (J. C. B., Nat. Hist. S. Devon).

Abundant in the Topsham marshes, on the banks of the Exe, and in the Clyst valley.

Occurs commonly in North Devon, but is not mentioned as being found on Lundy Island.

Grasshopper Warbler. *Locustella naevia* (Bodd.).

A summer migrant of very local distribution. Breeds.

It is rare in the Plymouth district, only a few specimens having been obtained there (E. M., Mag. Nat. Hist. n. s. i. p. 176, 1837; W. H. Row, Zool. 1845, p. 1190). Four specimens have been obtained in the months of April and May near Stoke (Plymouth). One heard and seen in Fancy Wood, April 19th, 1849 (R. A. J., ‘Naturalist,’ 1851, p. 87).

Montagu observed several about Kingsbridge, where it is still often seen and heard late in the summer evenings every year, and where it breeds (R. P. N.). A favourite locality for them is close to Kellaton, near the Start Point (E. A. S. E.). Seen occasionally near Ashbarton (T. & K.). Lord Lilford has informed us that he once found six nests of this bird in a small patch of ground on the northern slopes of Dartmoor.

It is often heard at Stoke Wood, near Exeter, where it is quite common in some years, and it is said to breed there. There are specimens in the A. M. M. from this locality, one of which was killed on April 26th, 1849 (R. C.). Heard near Exmouth, April 21st, 1869 (J. G., MS. Notes).

We were never able to detect the note of the Grasshopper-Warbler around Barnstaple; but it occurs in North Devon, as Mr. H. A. Evans, of the United Services College, Westward Ho, has informed us that it is met with in the furze hills close to the College every spring. From our experience of it in other parts of England, we have observed that it is very faithful to the same locality, the birds continuing year after year to nest in the same corner of a field. Nowhere have we found this Warbler so abundant as it is in the neighbourhood of Fairford, in Gloucestershire, where, when fishing on the Coln, we have sometimes been quite startled by its curious song, sounding like machinery running down, close at our

elbow in the long herbage, and have marvelled that it could have been produced by so small a bird. (M. A. M.)

[**Savi's Warbler.** *Locustella luscinioides* (Savi).]

“Mr. More (Ibis, 1865, p. 33) was informed by Rev. H. Roundell that he had obtained eggs near Kingsbridge, in Devonshire” (Newton, ‘Yarrell’s B. Birds,’ 4th ed. i. p. 393, note). Prof. Newton suspects an error in this statement. There is no record of the occurrence of this Warbler in the West of England, and its eggs are not sufficiently characteristic to prevent the possibility of mistake.]

Subfamily *ACCENTORINÆ*.

Hedge-Sparrow. *Accentor modularis* (Linn.).

[Dinnick, Seggo: *Dev.*]

Resident and abundant throughout the county, except the centre of Dartmoor. Breeds.

This homely-looking little favourite of our gardens and hedges is generally distributed and common throughout the West Country. We must also add that some are found with us throughout the year; but, bearing in mind that on the continent this species is migratory, going to the far north in the spring and returning again south in the autumn, we must express our suspicion that in all probability many of the Hedge-Sparrows which pass the summer with us leave us for the winter, and are replaced by others which reach this country from Northern Europe. One severe winter, when we were daily feeding a number of small birds in front of our dining-room window, we recollect that a single Hedge-Sparrow asserted itself as king of the company, and held its own against the miscellaneous gathering of Chaffinches, Robins, House-Sparrows, &c.

An albino nestling, killed by a cat at Alphington, near Exeter, is in the A. M. M. Another pure white nestling, also killed by a cat near Exeter, was brought to us June 26th, 1881.

Alpine Accentor. *Accentor collaris* (Scop.).

An accidental winter visitor of rare occurrence.

A specimen was killed on the cliffs near Teignmouth by Mr. Charles J. R. Jordan, January 9th, 1844, and is now in the possession of Mr. W. R. Hall-Jordan of that town, who has kindly allowed us to inspect it on several occasions. This bird was recorded by Rev. W. S. Hore (Zool. 1844, 566), but previously it had been erroneously described as a Richard’s Pipit (Zool. p. 494). (See W. R. H. J., in Trans. Devon. Assoc. vi. p. 709.) Another Alpine Accentor occurred in the same year at Berry Head (W. S.

H., Zool. p. 879); it is now in the Torquay Museum. Two were killed by Mr. J. Gatecombe near Plymouth on January 10th, 1859 (Zool. 1859, p. 6377). A fifth specimen has also occurred near Plymouth.

Mr. J. Gatecombe, who was our constant correspondent, kindly placed his MS. notes in our hands, from which we extract a characteristic account of his capture of the two Alpine Accentors mentioned above:—

“December 20, 1858. Saw a pair of Alpine Accentors near the citadel, but unfortunately had no gun.

“January 8, 1859. Saw the Accentors again, but did not get a shot at them.

“January 10, 1859. Shot the Accentors. Hurrah!”

To judge from a live Accentor which we kept for a little time, until it managed one day to fly out of a window and escape, we should say that at a short distance it would be difficult to distinguish an Alpine Accentor from a young Starling in its first plumage. (M. A. M.)

Family CINCLIDÆ.

Dipper. *Cinclus aquaticus*, Bechst.

Resident. Breeds. Much reduced in numbers, but some still frequent rapid rocky streams throughout the county, especially those on and in the neighbourhood of the moors.

Was frequently seen on the higher branches of the Plym about Bickleigh Vale (E. M.). Several, old and young, seen at Brent, fourteen miles from Plymouth, on the Avon, August 29th, 1883 (J. G., Zool. 1883, p. 422). We saw but one in that locality in August 1889. Mr. E. A. S. Elliot writes that it is “fairly numerous on the Avon. I have found nests under many of the bridges, also in a bank, built amongst the roots of a tree; within a few yards was a Kingfisher’s nest, and the public highway ran along the bank at this spot, yet the nests were never discovered, or, at any rate, robbed. On May 4th, 1881, I found a Dipper’s nest at Hatchbridge; on the 12th took it, with three eggs; on the 21st a new nest was built two feet above the old site” (MS. Notes). Two pairs nested yearly at Yealmpton (J. C. B., Nat. Hist. S. Devon, p. 203). A few used to be found on the Dart (T. & K.).

It has sometimes been seen amongst the rocks on the sea-shore at Torquay (H. S., Zool. 1860, p. 6797). It was formerly numerous on the Teign, especially at Dunsford Bridge. A pair used to breed at Exwick Weir, near Exeter. A nest and five eggs from thence, taken on March 24th, 1871, are in the A. M. M. One was shot near Topsham in 1839 (F. W. L. R., MS. vol. ii. p. 17). There were two in a bird-stuffer’s shop at Exmouth in December 1888 which, we believe, came from the Otter, on which river Mr. Ross says it was formerly numerous. Major Cary Barnard observed one near Branscombe some years ago. One was seen near Uplyme in August 1877 (Mansel-Pleydell, B. of Dorset, p. 19).

A few frequent the Taw. Two were seen in August 1886 on the East Lynn (O. V. A., Zool. 1887, p. 71).

It is only known on the western side of Dorsetshire, and is scarce in Western Cornwall.

The Dipper is a common bird by the side of all the small streams in North Devon, and seems to prefer the smaller waters to the large rivers, as we have observed in an extended experience as fly-fishers. We have heard the Dipper singing in mid-winter when there has been several degrees of frost. One bitter day, when we were on the watch for wild duck, a large block of ice came floating down the stream, on which sat a Dipper singing as if he was in full enjoyment of the weather. Speaking of the song of this bird, Mr. Polwhele says, with much truth, "Its song has a great resemblance to the sound of water gurgling among pebbles," a description which is thus utilized by Carrington, the Dartmoor poet:—

"With louder rush,
And deeper melody, a torrent flows
Full in the midst, meandering, as if loth
To quit the dale's dear bosom. On his marge
I mark the cheerful bird that loves the stream
And the stream's voice, and answers in like strains,
Murmuring deliciously."

We have seen the Dipper a thousand times, either on a stone in mid-stream, where he will be perched jerking his tail, and from whence we have often watched him walk deliberately into the water, beneath which he has two methods of progression, either by grasping the stones at the bottom with his feet, or by flying along beneath the surface in much the same manner as the Common Waterhen. We have also seen him when floating down a stream make a sudden dive and disappear, or flying over the water alight on its surface and plunge at once out of sight. The Dipper has been looked upon with suspicion by anglers, and has been accused by some of eating the precious ova of trout and salmon, and even to this day a price is put upon his head on some of the northern streams; but this charge may be considered as "not proven:" his ordinary diet is certainly only the larvæ of various Phryganeidæ and Dytiscidæ, and he is thus rather the angler's friend by destroying insects which in their larval state are highly carnivorous and prey upon the ova of fish.

When the Dipper is on wing he follows every winding of the stream, very rarely making a straight flight by cutting off corners. He is an early bird to nest, and as he sometimes builds in a stump projecting over the stream, his nest, as we have frequently seen, is apt to be swept away by a flood after a heavy fall of rain. The young Dippers are pretty little speckled creatures, and are not easily caught, as they scuttle off into the water and disappear on the appearance of danger. Our kind old friend, the late Mr. F. Bond, requiring some, we had one day to do a good deal of wading in the stream before we were able to secure the nestlings in a landing-net. (M. A. M.)

Family PANURIDÆ.

Bearded Titmouse. *Panurus biarmicus* (Linn.).

A casual visitor of very rare occurrence at the present day, but appears to have been a resident about fifty or sixty years ago. Breeds?

We have only once had the pleasure of seeing the Bearded Tit in North Devon, and this was one autumn day when we were stalking Duck in a marsh near Barnstaple, and being overtaken by a storm of sleet, were sheltering behind a tall sedge hedge, when, hearing a gentle twitter which was new to us close behind our head, we turned round and saw a small company of these little birds within a few inches climbing up the stalks of the sedges in the centre of the hedge. Having only large duck-shot with us, we did not attempt to secure a specimen. (M. A. M.)

The late Mr. Bower Scott, of Chudleigh, informed us, in 1882, that about ten years previously he had seen a specimen of this species at Slapton Ley. Mr. Howard Saunders, in his 'Manual of British Birds,' p. 91, says, "it breeds in one locality, which need not be revealed to the exterminator, in Devonshire."

Each year, with the advance of drainage, and the consequent curtailment of swamps and reedy ground, the resorts of the Bearded Tit become fewer, and many localities where it used to be not uncommon now know it no more. To this cause for its disappearance we regret to add another—the insensate greed of collectors for "British" specimens of this pretty little bird and its eggs.

In many of its habits, in the form of its nest, and in the colour of its eggs, which are minutely streaked with dark reddish brown on a white ground, the Bearded Tit would seem to come much nearer the Buntings than the true Tits, and "Bearded Reedling" would seem the better name for it. On the Norfolk Broads, apparently its last stronghold in England, it is well known by the name of "Reed-Pheasant."

Dr. Edward Moore observes that it is "rare; I am informed by Mr. Comyns that the Bearded Titmouse is to be found in the willow-beds opposite Topsham, on the Exe river,—a specimen in the collection of C. Tripe, Esq., of Devonport" (Trans. Plym. Inst. 1830, p. 310). Again, in his paper "On the Passerine Birds of Devonshire" (Mag. Nat. Hist. 1837, p. 176), he says, "rare; found on the Exe near Thorverton; and also near Topsham, as I am informed by Mr. Comyns, of Mt. Pleasant, near Dawlish, who has specimens;" and in Rowe's 'Perambulation of Dartmoor,' p. 233, he writes, "specimens at Mr. Tripe's, Mr. Comyns's, and four at Rev. Kerr Vaughan's." According to Bellamy it was "found only in one or two spots near Exeter," and it had been noticed only near Thorverton and Dawlish (Nat. Hist. S. Devon, 1839, pp. 208, 307). It is certainly no longer found near Topsham. It was occasionally met with in the neighbourhood of Bovey Heathfield (T. & K., 1830). There were two specimens in the collection of the late Mr. Cecil Smith stated to have come from "Devonshire."

This bird has occurred as a rare straggler in Cornwall and Dorset, but seems unknown in Somersetshire.

Family **PARIDÆ.****THE TITS.**

We have now reached a very interesting group of birds, small in size, but some of them of very handsome plumage, of which there are several species common and generally distributed about our gardens, plantations, and woods. They may be observed examining the stems and branches of trees for minute insects and their eggs and larvæ, in all sorts of positions, head downwards as often as not, or creeping along the lower sides of boughs back towards the ground. They have no song which is worthy of the name, although some of them, the Great Tit in particular, are great mimics of other birds and have a great variety of strident call-notes, which are often dissonant enough when suddenly obtruded among the pleasing strains of the Warblers of the copse. They are also carnivorous to some extent. Having for many winters in succession been in the habit of suspending pieces of suet in front of our dining-room window for the benefit of the Tits, we found that the Great Tit, the Blue Tit, and the Coal Tit were constant visitors, whereas we never once detected the Marsh-Tit, of which there were generally numbers about our grounds, coming to share in our hospitality. The amusing gestures of the Tits while climbing up the string or clinging to the pieces of fat will well repay any one who wishes to help them through the cold weather. The Great Tit is not altogether free from the imputation of occasionally killing and eating birds of its own size, the brains of the victims being regarded as the favourite morsels. Both the Great Tit and the Blue Tit are very destructive to the rows of peas in the kitchen garden, the Blue Tit in particular being very expert and quick in opening and rifling the pods.

British Long-tailed Titmouse. *Acredula rosea*
(Blyth).

[Bottle-Tit, Long-tailed Pie, Long-tailed Cap'n : *Dev.*]

Resident, generally distributed and abundant. Breeds. The "Long-tailed Pie" and its beautiful nest are known to every birds'-nesting boy in Devonshire.

This species and the Gold-crest are the smallest of our native British birds. It is generally to be seen travelling about in little companies of a dozen or more, consisting of the old birds and the brood of the previous year, and where one goes the others follow, like a game of "follow-my-leader," the one in front often calling to the next in order with a shrill scolding twitter. Except just at the pairing-time, it is rare to find only two of these little Tits together. The old birds and young roost together at night, clinging to each other like a swarm of bees, as we have witnessed at Gidleigh. (M. A. M.)

The beautiful bottle-shaped nests of these little birds vary very greatly in the materials of which they are constructed. Two we met with in a pheasant-cover, at no great distance apart, were built, the one almost entirely of withered oak-leaves and lichens, the other of moss and Pheasant-feathers, some of the short bright neck-feathers of the cock Pheasant being stuck, evidently for the purpose of adornment, around the tiny entrance-hole. The Long-tailed Tit probably occasionally rears a second brood, as we once had a nest sent to us which was cut out of a damson-tree, the little branches to which it was suspended being covered with ripe fruit. (M. A. M.)

In the winter-time Long-tailed Tits frequent alder-beds in company with Lesser Redpolls and Siskins, and in early spring are sometimes seen mingled with Willow-Wrens and other small birds. They sometimes unite in large flocks with other species of Titmouse.

Their numbers are probably recruited by immigration in winter, as small flocks are sometimes observed on the coast at that season (J. G., Zool. 1874, p. 3910); and, perhaps, the White-headed continental form of the species may reach our county in the autumn with other migratory birds. We have ourselves received a specimen shot near Cambridge, and Mr. J. Gatcombe obtained one from the neighbourhood of Bridgwater, in October 1871, and considered that it might be more common in England than is generally supposed.

Great Titmouse. *Parus major*, Linn.

[Ackmeel, Ackmal, Ackmall, Ackmaul, Hackmall, Heckmal, Hickmall, Hickemal, Hickymal, Heckymal, Hackeymaul, Hagmall, Big Hickmull, Eckmall, Uckmal, Ox-eye, Black-headed Bob : *Dev.*]

Resident, generally distributed in wooded districts, and common. Breeds. This species is remarkably powerful for its size, and will strike

down and kill small birds, as we have witnessed. (W. D'U.) The numerous forms of the provincial name "Hackmall" for it are derived from the strong blows or pecks it deals with its bill.

British Coal Titmouse. *Parus britannicus*, Sharpe and Dresser.

Resident, tolerably common in the south of the county, and is often seen in suburban gardens around Exeter and Exmouth in winter. Breeds.

With regard to the distribution of this species, we have noted that it is most plentiful where the Marsh-Tit is the reverse, and that where the Marsh-Tit is numerous but few Coal Tits are seen. In North Devon this species is but seldom met with, even in large fir-plantations, which are its favourite haunts, whereas the Marsh-Tit is plentiful and is to be seen everywhere. Precisely the opposite may be stated of North Somerset, where the Coal Tit is more abundant than any other species of Tit, and the Marsh-Tit is seldom seen.

All the nests of the Coal Tit we have taken were lined with a thick welt of rabbits' fur.

Marsh-Titmouse. *Parus palustris*, Linn.

[Black-headed Tit.]

Resident, common in some places. Breeds.

"Marsh-Tit" is rather an ill-bestowed name for this species, as it is by no means confined to marshes, and, indeed, is to be found, and nests commonly, in gardens and orchards in the driest situations. Holes in old oak trees are favourite places for it to breed in.

A very large flock, consisting of Marsh, Coal, and Long-tailed Tits, was seen flitting about some alder-trees by the side of the River Plym, August 31st, 1872 (J. G., 1872, p. 3260).

Mr. Leonhard Stejneger (in Proc. U.S. Nat. Mus. vol. ix. p. 201) distinguishes the British form of the Marsh Titmouse as a sub-species under the name of *Parus palustris dresseri* (vide Zool. 1887, p. 379).

Blue Titmouse. *Parus cæruleus*, Linn.

[Billy-biter, Blüthpecker, and Bluespick (N. D.), Blue-cap, Titmal, Ackmal: Dev.]

Resident, generally distributed and abundant. Breeds.

On May 15th, 1870, a boy found the dried-up body of a Redwing lying on its back in the cavity of an apple-tree in an orchard at Exwick, near Exeter, and on the breast and between the partially expanded wings, forming a cup-like hollow, a Blue Titmouse had deposited some moss, feathers, &c., to form a nest, and had laid nine eggs, on which she was

sitting. The Redwing must have taken refuge in the hollow of the tree and perished during the severe weather of the preceding winter. The lining of moss &c. was unfortunately removed by the finder before bringing this singular nest to Mr. Robert Cumming, by whom it was presented to the A. M. M.

The Blue Tit would seem to be the most carnivorous of the whole family, and was observed by Montagu to be a constant attendant in yards where horse-flesh was kept for hounds. The hen Blue Tit is a courageous defender of her nest, making a hissing noise and pecking at the hand of a would-be robber, thus gaining the soubriquet of "Billy Biter" from birds'-nesting urchins.

Mr. Gatcombe met with a large flight of this species, February 27th, 1872 (Zool. 1872, p. 3014).

Crested Titmouse. *Parus cristatus*, Linn.

A casual visitor of extremely rare occurrence. Its natural habitat is in the pine-forests of Scotland. It is also abundant in France and Spain, from whence it might wander to this county. The only recorded instance, however, in which it has been observed in Devon is that mentioned by Baron A. von Hügel, near Torquay, March 26th, 1874. The bird seen was so tame that he almost touched it with his walking-stick (Zool. 1874, p. 4065). It has never occurred in Cornwall, Dorset, nor Somerset, but has been met with, equally as far south as Torquay, in the Isle of Wight.

Family SITTIDÆ.

Nuthatch. *Sitta cæsia*, Wolf.

Resident in wooded localities throughout the county. Breeds.

Though nowhere numerous, the Nuthatch is sufficiently distributed in those portions of Devon suitable to its habits to be among our best-known and most familiar birds. In North Devon we have had numerous opportunities of observing it. Its peculiar movements upon a tree, where it is as often seen descending the trunk head downwards as progressing upwards or along a bough, its jerking and dipping flight, its strange whistle in the spring, and the sound of its hammering at a nut which it has placed in some chink in the bark of a tree for the convenience of being cracked are all part and parcel of country life in our woodland districts; and the bird is sufficiently conspicuous with its blue-grey back and russet underparts to attract attention so as to be generally known.

The Nuthatch breeds near Exeter, but it is not common near Kingsbridge, where Mr. R. P. Nicholls only occasionally receives a specimen, generally from the neighbourhood of East Allington.

A melanic variety, having the lower parts dark lead-colour and the rufous patch on the thigh larger than usual, was shot in Mount Radford,

Exeter, by Mr. Alfred Radford (W. D'U., Zool. 1883, p. 221). This specimen is now in the A. M. M. Mr. J. H. Gurney, Jr., kindly informed us that he saw a specimen in the Museum at Carlsruhe in which the throat and crown of the head were pure black.

Family TROGLODYTIDÆ.

Wren. *Troglodytes parvulus*, Koch.

[Jinty, Cuddy, Cuddy Vran (*West D.*), Kitty Tope, Tidley Tope, Titty Todger, Cracky or Crackil (*N. D.*)]

Resident, generally distributed and common. Breeds.

It commences building its nest very early in the year. On February 15th, 1856, we saw one carrying materials into a hole in a thatch roof near Topsham. We once found a Wren's nest which was almost entirely lined with the small feathers from a Sparrow-Hawk's breast. The Wren is one of the commonest visitants of greenhouses and conservatories, where its presence is highly beneficial and to be encouraged, as it busies itself in the capture of aphides and other small pests of plant-life. In cold rough weather a pair of Wrens have sometimes remained for days in our conservatory, never once, as far as we could tell, venturing outside its welcome shelter.

Many roost at night during the winter months in holes in the sides of hay-ricks, and we have frequently caught them in such places. There is a considerable immigration commencing in October near Exmouth, and Wrens are most numerous during that month and throughout the winter. A white variety was in the possession of Mr. J. Comyus (E. M., Trans. Plym. Inst. 1830).

Family MOTACILLIDÆ.

THE WAGTAILS.

The Wagtails are a very elegant family of birds, of almost completely terrestrial habits, catching their insect prey by chasing it with rapid steps upon the turf, or else by the side of drains and streams, or even upon the aquatic herbage whose growth in summer covers quiet pools, where the broad leaves of the water-lily will not yield to their dainty tread. Their long and graceful tails bow with every motion; they are never still; and for the most part are bright in their plumage, with gaily contrasted colours. They are all migratory, some of the species only visiting

us in the summer; while those which are found in this country throughout the year change their quarters within its limits, some of them, doubtless, leaving us altogether for more southern latitudes.

In their full adult dress the various species are to be easily distinguished, but the young are very puzzling from their close resemblance to one another, a remark which applies especially to the various closely allied forms of Yellow Wagtail. We confess to have found great difficulty in discriminating between several Yellow Wagtails obtained in this country which we have handled, and believe that it is quite impossible to assign the immature birds with any certainty to their respective species. And this difficulty is one which meets us not only in the Wagtails, but also in other summer migrants, from the fact that they arrive in all stages of plumage. Some of them, after leaving us in the autumn, directly they reach their warm winter-quarters in the North-African oases, may, perhaps, proceed to undertake again the cares of a family, and those birds which come to us in the following spring still in immature dress may be either the young birds which have there been produced, or else birds of the previous year, not yet arrived at their full plumage. The immense numbers of Wagtails congregating in autumn on our south coast is one of the most striking features of Devonshire ornithology.

White Wagtail. *Motacilla alba*, Linn.

A summer migrant. Arrives early in March and remains until September. It is not numerous, and appears to be rather local. Breeds?

The late Rev. R. A. Julian observed one in the Laira Marshes, near Plymouth, on April 24th, 1851, and the late Mr. J. Gatecombe obtained several specimens and saw many others there April 26th, 1853, April 24th, 1871, March 3rd, 1872, and September 1st, 1882 ('Naturalist,' 1851, p. 161, 1853, p. 228; 'Zoologist,' 1872, p. 3049, 1882, p. 459).

The White Wagtail has not been met with, as yet, within the Kingsbridge district (R. P. N.).

We have ourselves observed the White Wagtail several times near Exeter, and early in March near Exmouth. There is reason to believe a pair bred annually for many years in a pigeon-hole in the wall of a stable near Topsham (W. D'U.).

This, the true continental Pied Wagtail, is only a summer visitant to this country, and never strays very far from the part of the coast on which it has first landed. We have frequently seen it in North Devon in the spring and summer. Our friend the late Mr. W. Brodrick, during the time he resided at Ilfracombe, was one day attracted by a flock of pied Wagtails on the beach at Wildersmouth, whose tired gestures evidently announced that they had just arrived from a journey. This was at the beginning of May, and Mr. Brodrick had no doubt about their all being the continental *Motacilla alba*. Later on in the same summer (1860, we think) the same gentleman observed a pair of these birds frequenting a wall near Morte, in which he was pretty certain they had their nest. (M. A. M.)

Six males were seen on Northam Burrows in April 1871 (M. S. C. R., Zool. 1871, p. 2608).

Pied Wagtail. *Motacilla lugubris*, Temm.

[Dish-washer, Ditch-washer, Ditch-watcher, Dish-wash, Lady White Dishes: *Dev.* "Dish-washer" is probably a contraction of Ditch-watcher.]

Resident, generally distributed and abundant. Breeds.

The Pied Wagtail is seen throughout the year, but is especially numerous in spring and autumn, when there is a great immigration, and large flocks are observed at the latter season arriving on the north coast (H. A. E., Zool. 1883, p. 469), and congregating near the south coast. Immense numbers roost amongst the "spires" or reeds on the "lick-beds," or mud-banks, above Topsham, on the Exe, in August and September. Large flocks assemble near Plymouth in August (E. M., Mag. Nat. Hist. 1837, p. 176). Mr. H. Stevenson observed a large arrival of these birds on March 20th, 1859, on the south coast (Zool. 1860, p. 6797), and we noticed a flock near Exmouth on March 4th, 1890.

The Pied Wagtail is the English form of the preceding species, with which it is said to have interbred in this country. In September we have watched little flocks of this species at Ilfracombe passing along the coast one after the other on their migration, and keeping just at the edge of the cliffs. We have an adult from Torquay in spring plumage which has the white of the forehead deeply tinged with carmine. Other small land-birds which we have received from this part of the county had also occasionally a pinkish tinge on their plumage, possibly due to dusting themselves in the fine red soil which comes from the disintegrated red sandstones. (M. A. M.)

Mr. Henry Nicholls, of Kingsbridge, possesses a nearly pure white specimen.

Grey Wagtail. *Motacilla melanope*, Pall.

Resident and common. Breeds.

Remaining with us all the year, and nesting commonly in all parts of the south-western district, though certainly most numerous on the low lands during the winter months, when it appears by every pond, ditch, and stream, this very graceful species may be considered one of our characteristic West-Country birds. It is particularly numerous on moorland-streams, like the Exe and Barle, and by the side of the countless rills which merge from Dartmoor into the beautiful rivers watering the north and south of the county. It thus prefers the same country as the Water-Ouzel, and where that bird is resident and common there also the Grey Wagtail makes its summer home. In North Devon we have found it remaining throughout the year in the valleys, and not leaving them for higher grounds in the spring. On the picturesque Barle above Dulverton it is so abundant that the angler will observe it on almost every rock in the stream, and its lively and elegant motions as it flits lightly before him from stone to stone give an additional animation to the scene. We have plied our trout-rod by almost every one of the Devonshire streams, and have always been glad to welcome this beautiful Wagtail, which may well be a favourite with the angler, as its presence lends an extra charm to his pursuit. In its habits the Grey Wagtail is the most aquatic of the Wagtails, keeping close to running streams, from which it seldom strays; feeding upon minute water-insects, sometimes chasing the ephemeridæ on wing, sometimes to be seen running over the broad leaves of half-submerged water-plants in search of small mollusks and beetles. We have found the edge of some tiny waterfall to be a very favourite situation for its nest. Mr. J. Gatecombe often found it placed under the arch of a bridge.

There is a considerable immigration in August and September, when it is sometimes very numerous at Exmouth and all along the south coast for some weeks. It is remarkable that Montagu never met with this species in summer, but Dr. Tucker found it breeding upon the borders of Dartmoor, not far from Ashburton, in the summer of 1808 (Orn. Diet., Suppl.). Mr. Gosling, of Leigham, informed Dr. E. Moore that he had sometimes found the nest. Bellamy thought it rarely remained to breed, considering it merely a winter visitor, arriving in September and remaining until the end of March or the first week in April, frequenting river-banks, spring-heads, and the sea-coast (Nat. Hist. S. Devon, pp. 205, 373). A female was caught by a boy on her nest containing five eggs, April 25th, 1871, near Totnes (J. H. G., Zool. 1871, p. 2679). Young birds were seen flying about on the Dartmoor trout-streams and feeding like the old ones, May 22nd, 1873 (J. G., *in litt.*). In 1884 a pair reared two broods, building their nest in a niche in the wall of the town reservoir at Kingsbridge. They have bred there regularly each year since then up to 1890, when they were ousted by a pair of Pied Wagtails. In the summer of 1865 a pair bred at Shindle Mills, in a small hole in the wall of the mill, inside the overshot wheel, so that the birds had to pass in and out through the revolving wheel (E. A. S. E. and R. P. N., MS. Notes). Mr. Gatecombe saw some building by the side of the river Lydd, near Lifton Down (Zool. 1874, p. 4226). Mr. Cecil Smith has noticed breeding birds about the Watersmeet Valley, on the East Lynn (Zool. 1885, p. 4). The nest is frequently found near Exeter, Honiton, Barnstaple, &c. The black throat is assumed in February, and is retained until late in September.

Blue-headed Yellow Wagtail. *Motacilla flava*, Linn.

A casual visitor of rare occurrence.

This, the common Yellow Wagtail of Central Europe, is an occasional summer visitant in small numbers to this country, and has often occurred in the south-western district, more numerous in the Land's End portion of Cornwall, perhaps, than elsewhere. A few have been obtained in South-western Devon, none, as far as we know, in North or East Devon, while others have occurred at Taunton and at various other places in Somerset. This species is readily distinguished in the summer from the beautiful Yellow Wagtail sometimes seen on our pastures by its blue cap, white chin, and the white line running over the eyes. Mr. J. Gatecombe found that the white on the throat of this species varied considerably in extent in the various examples of it which came into his hands, some having only a small spot on the chin, with all below of a brilliant yellow, whilst in others the white extended as far as the breast. "One of the males which I killed is the finest I ever saw" (J. G., *in litt.*). It has been usually obtained in England in the months of April, May, and June, more rarely in the autumn, and sometimes in pairs.

According to Bellamy, Mr. Gosling saw a bird of this species ("*Motacilla neglecta*") accompanying a small flock of Pied Wagtails between Plymouth and Stoke about 1839 (Nat. Hist. S. Devon, p. 305, note). A pair was shot by Mr. J. Gatecombe in a marsh at Laira, near Plymouth, on May 1st, 1850 (Morris, B. Birds, ii. p. 143). He also killed a male on May 19th, 1851 (R. A. J., 'Naturalist,' 1851, p. 87); and saw a pair close to Plymouth in August 1874 (Zool. 1874, p. 4229). A male and female were shot by Mr. R. P. Nicholls, May 17th, 1880, at Huish Ley, near Kingsbridge; they had evidently just arrived, as they appeared very tired and quiet. They are now in the collection of Mr. Richard Andrew, Traine House, Modbury (H. N., Zool. 1880, p. 487; R. P. N., MS. Notes).

Yellow Wagtail. *Motacilla raii*, Bonap.

A summer migrant. Breeds rarely. Generally seen singly or in small flocks in April and early in May, and not then plentifully, but in autumn it congregates in great numbers on the sea-coast of the south-west part of the county. A few pairs remain during the summer to breed. A pair breeding at Torpoint, June 4th, 1860 (T. R. A. B.). A pair was found breeding at Plymouth in 1872 (J. G., Zool. 1872, p. 3166). Mr. F. W. L. Ross mentions a specimen seen in the Clyst Marshes, June 3rd, 1841, and we have seen it near Topsham in July. It departs in October.

Montagu never saw one in the breeding-season in Devonshire. According to him large flocks collect on the Start and other southern promontories of Devonshire about September, and Dr. Tucker constantly observed large flocks about Ashburton at the same season (Orn. Dict., Suppl.). Dr. Edward Moore mentions that immense flocks appeared along the south coast on August 15th, 1828, and remained about a fortnight feeding on the sea-shore (Trans. Plym. Inst. 1830, p. 305). Bellamy

states that it congregates in August and September on sheltered beaches (Nat. Hist. S. Devon, p. 377); and Mr. Gatcombe says that flocks of old and young are seen on the coast in August (Zool. 1874, p. 4229). The Rev. R. A. Julian says this species is common and much frequents the lines at Devonport and the marshes at Laira.

It occurs every spring on Huish Ley, or marshes, in greater or less numbers about the beginning of April, and in the fall there are large numbers spread over the whole district around Kingsbridge (R. P. N. and E. A. S. E., MS. Notes). It is occasionally seen in spring and autumn on the muddy shores of the estuary of the Exe, and in the marshes near Topsham, where we have obtained it in full breeding-plumage. The earliest arrival we have noted was on April 13th, 1853 (W. D'U.).

It is said to be an occasional breeder on Lundy Island (Trans. Devon. Assoc. viii. p. 307). It is only a passing visitor in spring and autumn in Cornwall.

The pleasant, musical call-note of the Yellow Wagtail is one of those voices of the spring which all rejoice to hear, and it is more particularly to be enjoyed by those living in the eastern and central parts of the kingdom, for, beyond showing itself for a day or two in the early spring and again in the autumn on those parts of our coast which form convenient rallying-points for its passage across the Channel, this bird very rarely stays long with us in the far West. We could never detect it nesting in North Devon, where it is a rare bird, and there are not many instances of its having nested in the south of the county. In the neighbourhood of Taunton we have remarked a few in the beanfields throughout the summer. When the meadows in the Midland Counties are purple with the nodding snake-heads (*Fritillaria*), and the Cuckoo's note is sounding all through the day, the Yellow Wagtail may be observed in some numbers in most of the large pastures, cornfields, or beanfields. Anyone who wishes to study this graceful and beautiful little bird will have to look for it in these its favourite haunts, for, unlike the common Pied Wagtail, it rarely approaches our dwellings and lawns. Many of these Wagtails arrive in this country in the spring in immature plumage, as we have shot them then with the black semicircle on the throat which is characteristic, more or less, of the young of every species of Wagtail. We have considered that these may possibly have been birds which had been reared during the sojourn of the adult birds in their winter-quarters, and which had not had time to arrive at their mature plumage before migrating north.

THE PIPITS.

The Pipits are a confessedly difficult group to study. Some of the species very closely resemble each other, and this is especially the case in the immature plumage. We

have only two species which are resident throughout the year, the Meadow-Pipit and the Rock-Pipit, the latter, as its name implies, to be chiefly met with on the coast-rocks. In the spring we are visited by a northern race of the Rock-Pipit, a bird which has been a source of much confusion, and by the Tree-Pipit, which is generally distributed and common. The Water-Pipit, a very common continental species, is a rare summer visitant, while the fine eastern Pipit, known as Richard's Pipit, has been obtained many times in our county during the winter months. Two other species of Pipit, the Red-throated Pipit and the Tawny Pipit, which have occurred elsewhere in England, have not yet been detected in this county; the latter has occurred once on the Scilly Islands. Like the Wagtails, the Pipits run rapidly on the ground, and are almost entirely terrestrial in their habits.

Meadow-Pipit. *Anthus pratensis*, Linn.

[Mountain-Lark, Tit-Lark, Titty Lark: *Dev.*]

Resident, generally distributed and abundant, especially on heaths and marshes. Breeds.

No one can walk across any common, moor, or down bordering the coast without encountering the tiny Titlark and observing its lively gestures. In the spring it may be seen rising off the ground, and, mounting a short distance into the air, it will pour forth its little twitter of a song, singing as it descends again with expanded wings and tail. In the winter the Titlark may be found in most water-meadows in the valleys, to which it then retires from the bleak moorlands. Its nest is very much affected by the Cuckoo, and, indeed, offers an easily found home for its unwelcome egg, as the Titlark builds upon the ground, often under some overhanging spray of whin, sometimes beneath the shelter of a tussock, but always in such a spot that the Cuckoo has no difficulty in depositing its egg. It is amusing to watch the anger and excitement of the pair of Pipits when the Cuckoo has discovered the site of the nest. They fly restlessly to and fro, attempting to drive off the enemy, and will pursue it to a distance. This is a very characteristic spring scene of bird-life in all moorland districts.

Large flocks of Pipits congregate in the neighbourhood of Plymouth about the beginning of September, and remain a few days (E. M., Mag.

Nat. Hist. 1837, p. 176; J. G., Zool. 1880, p. 47). On September 13th, 1883, quite a flight of Titlarks seem to have arrived on the south coast, all in very bright and newly-moulted plumage (J. G., Zool. 1884, p. 53).

Tree-Pipit. *Anthus trivialis*, Linn.

A summer migrant, common throughout the county. Breeds.

The Tree-Pipit arrives about the middle of April, and remains up to the end of September and even far into October. It is easily to be recognized from its habit of repeatedly flying up a short distance into the air from the topmost twig of some hedge-row elm, and after a short circling flight alighting again with quivering wings, as it pours forth its simple and not unpleasing song. We have often taken its nest in North Devon; its eggs, which vary greatly, are when fresh among the most beautiful of all produced by our smaller English birds. Both the Tree-Pipit and the Meadow-Pipit are more handsome after their autumn moult, when their plumage assumes a golden tinge.

This species is common at Plymouth (R. A. J., 'Naturalist,' 1851, p. 37). One was seen there as early as April 10th, 1877 (J. G., Zool. 1877, p. 279). The late Mr. T. R. A. Briggs has several times heard it at Egg Buckland on the 10th, 12th, 13th, and 14th of April. We observed many in fine plumage in wooded hedges on Brent Hill, September 13th, 1889. Mr. Cecil Smith saw a flock of about twenty near Exmouth on October 26th, 1873 (Zool. 1874, p. 2832). Nests are frequently found near Topsham; on the slopes of the Haldons; about Kingsbridge, and elsewhere. Mr. J. H. Garney observed the Tree-Pipit at Marldon, near Totnes, April 23rd, 1871 (Zool. 1871, p. 2679). Turton and Kingston frequently observed it in Rora and Penn Woods, near Ilington.

As might be expected from the absence of trees on Lundy Island this bird has not been observed there, although it is common in North Devon.

Richard's Pipit. *Anthus richardi*, Vieill.

A casual visitor of occasional occurrence, generally during the winter months.

As no fewer than twenty examples of this fine Pipit have in twenty-seven years (1842-1869) been secured in Devon, Cornwall, and the Scilly Islands, it cannot be said to be a very rare visitant to the West of England, especially when we recollect that in all probability ten times as many may have come and gone without recognition, and so have escaped slaughter. The 19th September, 1868, when three were shot at Trescoc, Scilly, is the earliest, while one recorded from Brighton on 25th April, 1850, is the latest, appearance in the year of this straggler from Asia that we know of in England, the greater number having been obtained in the months of December and January.

Its large size, its undulating flight, and its strange cry seem to have

drawn attention to it on each occasion when examples were obtained by Mr. J. Gatcombe in the south, and by Mr. G. F. Mathew in the north of the county; and the particulars furnished us by both those gentlemen of the gestures, note, and flight, as observed by them, agree in all their details. Nine examples in all came under Mr. Gatcombe's notice, and he has recorded the partiality of the bird for fields in which cows were feeding. Mr. Gatcombe was the first naturalist who detected the bird in Devonshire. The fact that no more specimens have been obtained in our county during the last twenty years, and only one seen, is probably due to the want of observers who are familiar with the bird, as many doubtless have visited us during that long interval.

Four specimens were obtained at Stoke, near Devonport, in December 1841 by Mr. J. Gatcombe, and another in November 1844 (W. S. H., Zool. 1844, pp. 496, 879). One was shot on the Laira Marshes near Plymouth on January 28th, 1853, being the seventh obtained within eight years (R. A. J., 'Naturalist,' 1853, p. 158). Mr. Gatcombe saw one March 14th, 1878, near Plymouth. He altogether met with seven examples in that neighbourhood himself, besides two others that were brought to the bird-stuffers in the flesh (Zool. 1878, p. 249).

One was killed at Braunton Burrows, December 30th, 1864; another January 4th, 1869; and a third December 8th, 1869. (G. F. M., Zool. 1865, p. 9457; 1869, p. 1561; 1872, p. 2919; and 'Naturalist,' 1866, p. 358).

Water-Pipit. *Anthus spipoletta*, Linn.

A casual visitor in early spring, of very rare occurrence.

On the 18th March, 1883, when returning from a long country walk, as we passed the Custom House on Exeter Quay, a bird suddenly appeared before us which we at once perceived was something new to us. It was rather tame, but restless, and evidently a stranger, creeping along at the base of the walls of the goods' sheds, where it attracted the attention of some Sparrows who mobbed it. Observing it at the distance of a few yards we saw it was a Pipit having a grey head and back, white throat, breast, and belly, slightly tinged with buff on the sides of the neck, and the outer tail-feathers, which it displayed when opening and shutting its tail, were pure white. South-easterly winds had been prevalent for a fortnight previously. We think there can be little doubt but that it was a Water-Pipit in breeding-plumage, and having lately inspected specimens collected by Lord Lilford in the South of Europe we are confirmed in this opinion (W. D'U., Zool. 1883, p. 221). Mr. Gatcombe saw one on March 8th, 1873, near Plymouth (Zool. 1873, p. 3562).

The specimens reported from Torquay and from Plymouth in March 1868 appear to have belonged to the variety *rupestris*, Nilsson, of the next species (Zool. 1868, p. 1254; and J. G. *in litt.*). The Water-Pipit has not been recorded as occurring in either Cornwall, Dorset, or Somerset.

Rock-Pipit. *Anthus obscurus*, Lath.[Rock-Lark, Sand-Lark : *Dev.*]

Resident, common all along the coast, especially in the autumn, when large flocks arrive. Breeds.

Never to be met far off from the sea-shore, where its monotonous call-note is associated with the sounds only there to be heard, this species is resident with us all the year, and may be seen passing with a jerky flight from one rock to another, never very long resting in one place, and continually uttering its "chink, chink" of a cry. The nest, placed in some cranny in the cliff, is difficult to find: one we had in our possession we have always regarded as a wonderful specimen of patience and industry on the part of the tiny architects; it was taken on a small rocky island three miles from land, and was thickly lined with horse-hairs. How many times the Pipits must have flown backwards and forwards over these three miles of water in procuring the materials for the nest!

A large Pipit much greyer in colour than the ordinary Rock-Pipit, with hardly any vinous colour on the breast, is seen in pairs in spring on the south coast. A number of specimens of this variety were obtained at Beer in February 1883, by Mr. Henry Swaysland, Jnr., and some were sent to us under the impression that they were Water-Pipits (W. D'U., Zool. 1883, p. 221). We saw a pair on the cliffs at Exmouth just arrived, April 24th, 1891.

A specimen obtained at Torquay, and sent to us by Mr. E. Burt, was so very red that Mr. Gould, to whom we forwarded it, considered it had been dusting itself in the red soil, but this was not the case. This bird is recorded by him in his beautiful work on British Birds. Together with other vinous-tinted Pipits obtained at Torquay, it probably belonged to the variety *rupestris*, Nilsson.

Large flocks have been observed on the coasts in autumn (G. F. M., Zool. 1874, p. 4252; J. G., Zool. 1880, p. 47).

Family **ORIOOLIDÆ.****Golden Oriole.** *Oriolus galbula*, Linn.

A casual visitor in spring and summer of not very unfrequent occurrence, especially in the South Hams. It is known to have bred in North Devon.

Only one species of the handsome family of the Orioles is found in this country, where its beauty has proved to it a fatal gift. There is no doubt that if it could escape persecution the Golden Oriole would be a regular summer migrant, nesting in limited numbers in our shrubberies; but its brilliant plumage at once leads the person who has detected it to rush off for a gun, and then we read in some local newspaper the notice of a rare bird having been obtained. Professor Newton says:—"If undisturbed, they would breed as freely in our woods and orchards as they do

ou the Continent." It appears regularly each year in the Land's-End district of Cornwall about April 20th, where as many as forty have been seen in a flock.

Mr. J. R. Griffiths (late of Pilton Abbey, near Barnstaple), who was well acquainted with this bird, having often seen it on the Continent, informed us that a pair of Orioles frequented his grounds and nested in the shrubbery (More, in 'Ibis,' 1865, p. 20; G. F. M., 'Naturalist,' 1866, p. 358).

The singular nest of the Golden Oriole, which is suspended between two forking boughs, to which it is woven, would seem to show a connection between the Orioles and the Weaver-Birds.

Specimens were obtained at Okehampton Park by Mr. Newton, also by Mr. R. Julian at Estover, near Plymouth, and at Mount Edgumbe (E. M., Rowe's Peramb. Dartmoor, p. 233; Mag. Nat. Hist. n. s. i. p. 17; Trans. Plym. Inst. 1830, p. 302). A female was shot in the neighbourhood of Mount Edgumbe April 29th, 1853 (J. G., 'Naturalist,' 1853, p. 228). One was seen at Leigham in 1856 or '57, and a female was obtained at Millbrooke (J. B. R., Trans. Plym. Inst. 1862-3, p. 65). Mr. Jolley saw a male in fine plumage in April 1866, near King's Tamerton, and a male occurred at Saltram in that year (J. G. and J. B. R., MS. Notes). Mr. Henry Nicholls saw a male in the marsh near the salmon-weir on the Avon, near Kingsbridge. One was seen in July 1887 in an orchard at Stokenham (Pidsley, B. of Devon, p. 33).

In the Museum of the College at Westward Ho! is a young male which was shot at Atherington. The Golden Oriole has been frequently observed near Barnstaple, and it has visited Lundy Island, but the Rev. H. G. Heaven tells us that it has not been seen there of late years.

This beautiful bird is of almost regular occurrence in Cornwall, and occasionally visits Dorset and Somerset.

Family LANIIDÆ.

THE SHRIKES.

Of the very large family of the Shrikes we have only one which is at all common in this country, and this is the Red-backed Shrike, a well-known summer migrant. Two other rare summer visitors, the Woodchat and the Lesser Grey Shrike, have only once or twice occurred in Devonshire; while the very conspicuous Great Grey Shrike, not an infrequent visitor in winter to the eastern parts of the kingdom, must be considered as rare in our county, and in the West of England generally. Their habits make the Shrikes easily recognized, as they perch on some exposed twig, dead tree, or telegraph-wire, whence they

continually sally forth on some passing insect, or make their pounce on a mouse or small bird seen below. They are very tame, permitting a very close approach; and are all handsome, conspicuous birds, lively and restless, continually flirting their long tails from side to side.

Great Grey Shrike. *Lanius excubitor*, Linn.

A winter visitor of occasional occurrence; specimens are also recorded as having been obtained in spring, summer, and autumn. We have only known seven occurrences of the Great Grey Shrike in North Devon, two of which occurred to ourselves. One day when out shooting in the neighbourhood of Barnstaple we came upon a Great Grey Shrike being mobbed by a lot of Finches, one of which he had been devouring. As the bird flew off we noticed its undulating flight. Another was seen by Mr. Murray W. Mathew in the early spring, in a lane just outside his house in Barnstaple. Perched upon a small ash tree in the hedge it permitted him to walk immediately beneath.

One shot at Leigham 1815, one seen at Ham, near Plymouth, 1830, one shot on Haldon by Mr. Tucker, of Mount Pleasant, near Dawlish, in June 1829, and one shot near Millaton (E. M., Trans. Plym. Inst. 1830, p. 299; Mag. Nat. Hist. 1837, p. 176; Rowe's Peramb. Dartmoor, p. 233). One shot in November 1849 at Roborough (R. A. J., 'Naturalist,' 1851, p. 58). A male killed near Plymouth, January 9th, 1854 (J. G., 'Naturalist,' 1854, p. 66). One obtained by Dr. Tripe near Plymouth (J. B. R., MS. Notes). Ashburton (A. G. C. T., 'Guide to the Scenery'). One seen near Topsham in April 1839 (F. W. L. R., MS. ii, p. 66). One near Exeter early in 1845 (W. R. S., Zool. p. 983). One killed in Tawton Marshes, above Barnstaple, in October 1855, another near Barnstaple, January 1858; four seen there December 7th, 1869; and one March 1870 (M. A. M., Zool. pp. 5345, 6015; 1870, p. 2144; G. F. M., Zool. 1872, p. 2918). One shot at Torquay in July 1865 (R. C.), and one seen October 14th, 1869 (A. von H., Zool. 1870, p. 1983). One seen between Lydford and Bridestowe, November 15th, 1876 (J. G.). One near Honiton winter of 1870-1 ('Exeter Gazette' for January 13th, 1871). One at Watcombe beginning of April 1877 (G. R. Corbin, Zool. 1877, p. 444). A young female shot March 1st, 1882, at Morehard Bishop was seen by us in the flesh (Zool. 1882, p. 148). A young male was shot on the banks of the Kingsbridge Estuary, November 19th, 1883, by W. C. Mackie (E. A. S. E., Zool. 1884, p. 147); this specimen is in the collection of Mr. Henry Nicholls, Kingsbridge, where we saw it in September 1890. One at Broad Clyst, near Exeter (W. E. H. Pidsley, in 'Notes and Gleanings,' i. p. 46).

Some of the above occurrences may possibly have been examples of Pallas's Great Grey Shrike (*Lanius major*, Pallas), which has been met with on several occasions in the British Islands; it has only one white bar on the wings, whilst in the typical *L. excubitor* there are two, *i. e.* one on the bases of the secondaries and one on the primaries. These two races are, however, known to interbreed. The summer instances may perhaps relate to the next species.

Lesser Grey Shrike. *Lanius minor*, Gmel.

An accidental visitor of extremely rare occurrence. An immature bird was obtained near Plymouth, September 23rd, 1876. It was taken alive by a bird-catcher (J. G., Zool. 1876, p. 5178).

We think it likely that the Lesser Grey Shrike has been sometimes confounded with the preceding and larger species, and examples may have been obtained without being recognized or recorded. A very fine adult male was forwarded to us from Great Yarmouth in 1870 as a Great Grey Shrike, and is still, we believe, the only British representative of this species in perfect adult plumage. The young bird captured in September 1876, above mentioned, was actually looked upon by the bird-stuffer into whose hands it passed as only a young Great Grey Shrike, and was treated so carelessly that it narrowly escaped being lost or destroyed when it was luckily seen by Mr. J. Gatcombe, and recognized as a rarity.

The Lesser Grey Shrike has occurred on the Scilly Isles; a female was recorded by Mr. Rodd as having been shot there in November 1851.

Red-backed Shrike. *Lanius collurio*, Linn.

[Butcher-Bird: *Dev.*]

A summer migrant, not very common, but frequently met with in the neighbourhood of the sea-coast both in the north and south of the county. Breeds.

Nowhere a numerous species, yet sufficiently dispersed over the south-western district of England to be a well-known and familiar bird, the Red-backed Shrike is one of the latest to arrive among our summer migrants, and among the first to depart. The 2nd May is an average date for its first appearance, and by the end of the first week in September, and often earlier, it has left us again for the south. Sand-hills on the coast, especially those which have a tangled growth of wild rose, blackthorn, and other shrubs, are a very favourite haunt for this bird, as they afford an abundant supply of moths, beetles, and other insect food. Thick hedge-rows, commons, and furzy hill-sides, as well as gardens and lawns not far from the sea, are much frequented, and in a summer day's drive it may often be seen seated on the telegraph-wires, from which commanding perch it frequently descends on a passing insect. We have had good opportunities of studying the habits of this handsome and interesting bird, as there was each year a nest on our lawn in North Devon, and we have been similarly favoured in other parts of the West of England where we have resided. We have kept the young birds in a cage, where they have soon become tame and impudent. We did not attempt to keep them through the winter, but set them free at the end of August. Like raptorial and many insectivorous birds, Shrikes void the indigestible portions of their food in the form of small pellets. This they do even in captivity, as our tame birds, fed upon a mixed diet of raw meat, hard-boiled eggs,

and barley meal chopped up together, used to eject the siliceous particles of the barley meal &c. in this manner. At a meeting of the Exeter Naturalists' Club held at Pynes, September 25th, 1863, Mr. R. Cumming stated that, as an experiment, he had put a thorn bush into a cage in which he was rearing a brood of Red-backed Shrikes. He next gave the young birds a live mouse, which they instantly seized, and impaled alive on the thorn bush, thus proving that this curious practice of the Shrikes is an inherited instinct, and not acquired by the birds' only copying what their parents do. The sun shining on the snowy breast of the male Red-backed Shrike, as he was sitting on some favourite perch, has often enabled us to detect him at a considerable distance, and we have noticed that these birds have their favourite stations to which they return year after year. It has been stated that the female bird, dull of plumage in comparison with her mate, has sometimes, like an old hen pheasant, been known to assume the bright dress of the male.

The Red-backed Shrike is, perhaps, not quite so numerous in South Devon as in the northern part of the county, but the nest is frequently found around Topsham, Exmouth, Houton, and Kingsbridge (E. A. S. E. and R. P. N.), and we have watched a brood during the past summer (1891) that was hatched out from a nest in an elm tree growing in a hedge in our own grounds at Exmouth. The habits of the old birds are very similar to those of the Spotted Flycatcher, perching on the tops of posts and rails, and pouncing every now and then on a large moth, such as a Large Yellow Underwing, in the long grass of a hayfield. The young were fully fledged in July, and the parents were most assiduous in feeding them long after they could fly. As they were not molested, this brood frequented the same spot day after day for some weeks, disappearing about August 18th.

Woodchat. *Lanius pomeranus*, Sparrman.

An accidental visitor of very rare occurrence. The evidence relating to the recorded instances in Devonshire is not satisfactory, and it has only been said to have been obtained in the south-western part of the county. One, however, a male in full adult plumage, was seen at Lyme-Regis, on the eastern border of Devon, June 22nd, 1876 ('Field,' July 5th, 1876).

"Shot at Mutley by Pincombe of Devonport" (J. C. B., Nat. Hist. S. Devon, p. 200). A young bird is said to have been killed at Kingsbridge about the year 1852 (Zool. 1852, p. 3474). This is reported by Mr. Charles Prideaux, who states that he had in his possession an adult of this species of Shrike, "killed in Somersetshire," and a young one obtained at Kingsbridge. Mr. Prideaux has been dead for many years, and a part of his collection is deposited in the Town Hall at Kingsbridge. A small Shrike, from which the feathers have been quite denuded by moths, may represent one of the above-mentioned specimens. However, Mr. Henry Nicholls does not remember the occurrence of a Woodchat in his neighbourhood.

A female Woodchat was captured by means of bird-lime at Plymouth in the autumn of 1866.

This specimen Mr. Gatcombe stated to be the only one he ever saw that had been killed in Devonshire. He detected it at a birdstuffer's, named Rogers, at Plymouth, and it was *said* to have been taken by a bird-catcher (J. G. *in litt.* and Zool. 1866, p. 577, and 1873, p. 3717). This bird is now in the collection of Mr. J. H. Gurney. A specimen in Mr. Byne's collection had the reputation of having been obtained in Devon, but possibly belonged to the same category as other rare birds in that collection.

An adult specimen in Mr. E. H. Rodd's collection was caught in a boat off Scilly, in September 1840, and during the autumn of 1849 several birds of the year were captured on the Scilly Islands. The Woodchat has been killed at Bloxworth in Dorset, and has nested twice in the Isle of Wight.

Family AMPELIDÆ.

Waxwing. *Ampelis garrulus*, Linn.

A casual visitor, appearing at long intervals of time during the winter months. None seem to have occurred in Devonshire since the winter of 1849-50, when there was a great visitation of this bird to the whole of England.

If an illustration were needed of the increased knowledge possessed by modern ornithologists of the habits of many birds which were almost unknown at the beginning of the present century, no better one could be furnished than by contrasting the exhaustive history given by Professor Newton of the Waxwing (Yarrell's 'British Birds,' 4th ed. vol. i. p. 523) with the meagre details which were in the possession of Col. Montagu and the naturalists of his day. No bird was surrounded with more mystery to the past generation of ornithologists than this very beautiful species, which appears in this country from the north at most irregular intervals in the winter months, in some years being seen in flocks on our eastern coasts, and then, perhaps, several years will pass without a single example being noticed. Waxwings are very seldom seen in the Western Counties, but when a great Waxwing year comes round, like 1850 for instance, a few filter through and reach as far to the west as Devonshire. While we resided at Bishop's Lydeard in W. Somerset, we knew of two instances of the occurrence of the bird in that village, both in the month of February.

Polwhele (1797) mentions a specimen killed in an orchard at Ashburton; and one in 1790 at Totnes, two others being also killed in Devonshire in that year. Col. Montagu says that this species had occurred as far west as Devonshire, one having been shot in the park of Lord Boringdon at Saltram (Orn. Dict., Suppl.). Dr. E. Moore also states that several had been shot in the neighbourhood of Plymouth, and especially in the plantations of Mount Edgcumbe and Saltram. Specimens were

preserved in Messrs. Rowe's, Bolitho's, and Drew's collections (Mag. Nat. Hist. n. s. i. p. 176, 1837). Dr. Tucker gives the Waxwing a place in his list of rare land-birds which had been discovered near Ashburton (Jones's 'Guide,' 1823, p. 35). A female was shot at Stony Coombe, near Kingkerswell, on January 20th, 1829, and shortly afterwards a male at Ashburton (T. and K. 1830; W. R. H. J., Zool. 1843, p. 188). A male was obtained in the parish of Blackawton, near Dartmouth, in January 1850 (H. N., Zool. p. 2767). This specimen passed into the collection of the late Mr. C. Prideaux. Two specimens were shot near Exeter in January 1850 (R. C.). A fine male, said to have been shot at Crediton in that winter, is in the A. M. M. The late Capt. Tomline, of Rumwell House, near Taunton, possessed a Waxwing which had been shot close to Exeter.

Mr. E. Parfitt says:—"The last I saw were killed by Mr. Harte at Alphington, near Exeter, about ten years ago" (Trans. Devon. Assoc. 1876, p. 270). Mrs. Hart, however, informed us that she knew of no Waxwings having been shot by her son, but some Crossbills were killed by him, near her house, about 1867, which she still has in her possession, with many other rare birds he collected. Possibly Mr. Parfitt's note got misplaced in copying, and should have been applied to the Crossbill, and not to the Waxwing, no specimen of which, as far as we are aware, is recorded from Devon for 1866-67, though it occurred plentifully in the East of England in that winter.

Family MUSCICAPIDÆ.

THE FLYCATCHERS.

The Flycatchers have very much the gestures of the Shrikes and, like them, have their watching-stations, generally some favourite bough, or upper rail of a gate, or post, from which they pounce upon any passing insect, returning with their captured prey to the perch they had started from. When the game of croquet was introduced, the iron hoops, when left in the ground, were at once adopted as convenient posts of observation by the Spotted Flycatcher, the only one of the family which is common and generally distributed.

Spotted Flycatcher. *Muscicapa grisola*, Linn.

[Wall-plat: *Dev.* "Plat," a flat beam lying on the top of a wall, a usual site for the nest.]

A summer migrant, generally distributed and common. Breeds.

No one can have failed to notice the little dusky-grey bird, with its spotted breast, which invariably appears on their lawns, and about their houses and outbuildings, about the middle of May, when the loitering summer has at length made up its mind to smile upon the land, and when

the oak, the laggard among the trees, is putting forth its leaves. The Spotted Flycatcher prefers the near neighbourhood of man, and does good service in assisting the Swallow and other insectivorous birds in thinning the air of those tiny insect swarms which might become an annoyance. It departs in August and September. A greyish-buff variety was seen by Mr. Gatcombe at Plymouth, August 5th, 1884; it showed no trace of the usual dark markings on the head and breast (Zool. 1885, p. 23). In the A. M. M. there is a nest of this bird constructed in the dried skin of a hedge-hog.

Pied Flycatcher. *Muscicapa atricapilla*, Linn.

A casual summer visitor, more frequently met with in North Devon than in the southern part of the county, where it is rarely seen. It is believed to have bred in North Devon.

With the strong contrast presented between the glossy black back and the white throat and underparts, and with the white forehead patch and white bar upon the wings, this Flycatcher, in the plumage of the adult male, is so conspicuous that there is little chance of its being overlooked. We have often searched for it on Dartmoor, and also on high moorlands in North Cornwall, without seeing it, and consider its occurrence anywhere in the South-western Counties as only accidental. Col. Montagu never met with this little bird in South Devon, and says:—"It is one of the very few amongst the smaller tribe of birds whose nest we have not taken with our own hands" (Orn. Dict., Suppl.). The Pied Flycatcher is equally rare in Somerset; besides one killed near Taunton by Mr. C. Haddon, we only know of one other, which occurred in the neighbourhood of Wells in the spring of 1870 (F. D. Power, Zool. 1871, p. 2439). About half a dozen specimens have been obtained in Dorset, and we have seen two specimens in the Truro Museum from Looe in Cornwall. It has once occurred near Penzance, and is a rare autumn straggler to the Seilly Islands.

Dr. E. Moore mentions that a specimen was seen near Barnstaple in June by Major Harding of Ilfracombe (Mag. Nat. Hist. 1837, p. 176). He also states, on the authority of the late Rev. W. S. Hore, that there was a specimen in Drew's Collection at Plymouth. A male bird was shot by Mr. Samuel Tucker at Mount Edgcombe several years before 1851, at the end of April, and was preserved in Mr. Bolitho's Collection (R. A. J., 'Naturalist,' 1851, p. 88; and B., MS. Notes). One was killed by Mr. James Dodd in his garden at Eldad, Plymouth, Aug. 23rd, 1853 (J. G., 'Naturalist,' 1854, p. 18). In August 1859 two old birds and four young ones frequented Pottington Marsh, a large rushy meadow close to Barnstaple, and two of them were shot which proved to be birds of the year. Old birds were observed by us haunting some low bushes in the vicinity of a boggy part of Huish Down, near Combmartin, at the beginning of July 1858, and they probably bred there. A pair were shot on Lundy Island in May 1861, and passed into the collection of the late Dr. Woodforde of Taunton, and are now at Taunton Castle Museum. The late Mr. J. C. Hele, of the Knowle, Newton Abbot, informed us that he had a male Pied Flycatcher shot at Isham orchard, near Torquay, April 23rd, 1866. Part of an adult male was picked up near Exford: it had probably been killed by a Hawk. Another, an adult male, was seen by us one day in May when fishing the upper waters of the Barle. The Pied Flycatcher has been seen twice near Tavistock (A. Mitchell, Pidsley's B. of Devonshire, p. 37).

[*Observation*.—A continental Pied Flycatcher, *Muscicapa collaris*, closely resembling the foregoing, but with a white ring round its neck, might be expected occasionally to occur, and may, perhaps, have been confounded with *M. atricapilla* in some instances; as also the little Red-breasted Flycatcher, *Muscicapa parva*, several specimens having been obtained in the Land's End district and on the Scilly Islands.]

Family HIRUNDINIDÆ.

THE SWALLOWS.

These universally welcomed and favourite birds may lay claim to being the best known of our summer migrants to ordinary people; and yet, although the various species which come to our shores are most easily to be distinguished, it is common to hear of their being all lumped together, and even confounded with the Swift, which together with the Martin bears the general name of Swallow, whilst Swallows are often called Swifts. Following this general idea ornithologists formerly united the Swallows, Swifts, and Nightjars together amongst the Fissirostres, or wide-gaping birds, but most scientific men now separate the Swifts and Nightjars on account of certain anatomical differences and place them with the Picariæ, a course which we have pursued in this work, because the Committee of the British Ornithologists' Union have done so in their 'List,' which we have elected to follow, though such an arrangement can only be considered as provisional. In discussing the Swallows in general, however, we have dealt with the Swift in connection with them; they are so constantly associated together that it is difficult to avoid doing so in a work of a popular character.

The Swallows are pre-eminently the heralds of spring, and when they have all left us we are sadly reminded that the dark days of winter are about to return. Their presence is to be detected the very day of their arrival, as they

love to frequent our dwellings, and to place their nests in simple confidence in trust to our care and keeping—our chimneys, cottage-eaves, church-towers, railway-stations, and out-buildings being the usual sites in which they build.

First to reach our shores in the spring is the tiny Sand-Martin, who truly, like the primrose, “comes before the Swallow dares,” and is generally the subject of the notice of “An early Swallow” in the local newspapers. In West Somerset we have seen the Sand-Martin as early as 12th March, and it has been observed in the early part of that month in South Devon. By the end of March it is usually common.

About the end of March also dwellers by the sea-side may count upon seeing a pair or two of genuine “early Swallows” hunting for flies among the depressions of the sand-hills, or beneath some sheltered wall close to the beach. In such places on the Braunton Burrows we have come across Swallows on the 26th March, and in South Devon they have been seen as early as 8th March. The first large flight, however, does not reach this country until 10th April as an average date, and is closely followed by successive flights until the end of the month, by which time every cottage chimney and accustomed station will have received its contingent of these cheerful twittering birds of summer. The latest of the family to arrive is the House-Martin, and it depends altogether upon the season whether it or the late-coming Swift is the first to make its appearance. The 26th April is an average date for the first Swifts, but in some late springs they will not have been detected before the 4th or 5th May. The end of April also witnesses the arrival of the House-Martins, but if the weather is ungenial they sometimes delay their passage until the middle of May.

In departing from us they reverse their order in arriving, the Swift, usually the last to come, being always the first to go. The 10th of August is an average date for its migration south, a few stragglers are sometimes seen in the early days of September, and there are instances of the Swift having been seen in South Devon as late as November 27th. We next lose our delightful little friends the Swallows. About the middle of August the early broods begin to congregate on our house-tops, church-towers, telegraph-wires, or favourite trees, and with much twittering lay down their plans for their approaching exodus. As they arrive by successive flights so they take their departure. A second mustering takes place in the middle of September, when the great body leaves us. In North Devon only a small detachment remains behind to be brought together in October, and any Swallows seen later are due to very late broods not yet strong enough for the long journey to the sunny south. But these soon become exercised in wing and are able to follow their companions. In South Devon numbers of both old and young remain on the coast up to the end of October. The chance Swallows sometimes seen in the winter months are unfortunate weakly laggards compelled by accident or stress of weather to linger in our ungenial climate. The Sand-Martins are seldom seen after September; but latest of all to leave are usually the House-Martins, which have often eggs in their nest or young nestlings to feed at that date. This pretty little bird will linger on, seeming loath to go, until the chill autumnal winds checking the supply of insect food, and the irresistible instinct driving it south, compel it, too, to depart, often at the last moment in a great hurry, and leaving callow young ones to die of starvation in the nests. We have seen numerous House-Martins on the North Devon coast as late as 20th November, a stiff and freezing

N.E. wind blowing at the time, the birds having evidently a great difficulty in obtaining food and hunting for it under any sheltered wall or hedge. As long as the wind kept in the N.E. they seemed unable to depart, but directly it veered a point or two they were off. In their migrations birds cannot fly with the wind dead abaft; they wait for a side wind which renders their passage easy, and for this reason, no doubt, these House-Martins were detained so long upon the coast. In South Devon and Cornwall, House-Martins have been often seen as late in the year as mid December.

Swallow. *Hirundo rustica*, Linn.

[Chimney-Swallow.]

A summer migrant, generally distributed and abundant. Breeds.

The Swallow arrives usually in the second or third week in April, but stragglers were observed on March 22nd, 1855, March 16th, 1862, March 18th, 1867, March 8th, 1881, and March 16th, 1882. We have also several times seen Swallows in the first week of April in South Devon. They are generally first noticed on the southern coast of the county, but as they fly at a considerable elevation when migrating they may strike some distance inland before descending, and are often first seen flying over rivers and ponds. Great numbers congregate on the South Coast in autumn preparatory to their departure for the south, many not leaving until the end of October. We have more than once seen young birds in November, and shot one on the 24th of that month in 1854.

The Swallow is not so numerous within the City limits of Exeter as the Martin, but at Exmouth it is the most abundant of the two. It breeds in barns and outhouses and cottage chimneys, beginning to build soon after its arrival, and rearing two broods in the season.

White specimens occur rather frequently. A brood of buff-coloured Swallows was hatched at Honiton some years before 1883, as we were informed by Mrs. Parkin. Mr. E. A. S. Elliot shot a specimen with light chestnut underparts on April 28th, 1887, at Thurlestone. This specimen was examined and identified by Messrs H. E. Dresser and R. B. Sharpe.

In few birds is the migratory instinct so strongly developed as in this favourite companion of our English summer, which, perhaps, may claim with the common Stork to have enjoyed the closest observation and study*. It has been ascertained over and over again that the same Swallows return year after year to the same homes, and we can well remember, when

* Jeremiah, viii. 7.

strolling on our lawn one beautiful April morning, the sudden descent of a little band of Swallows which seemed to burst from the clouds directly overhead, and after circling a few times with joyful twitterings, accepted by us as a glad greeting and, perhaps, thanksgiving for the shelter they had previously found upon our premises, flying off to the chimneys to inspect the condition of their old abodes. Sometimes Swallows are observed either arriving on our shores or departing from them in great flocks. In the 'Zoologist' for 1864 is an account of an extraordinary flight which was seen at Instow, on the North Devon coast, one evening at the beginning of May. Between the hours of seven and eight a large flight of birds was seen approaching which proved to be Swallows. It was calculated that the birds covered a space of nearly a mile in length, by one third of a mile in breadth, and that they were many thousands in number. Their course was from N. to S. They were from two to three gun-shots high, and appeared to be in a fatigued condition. The direction these birds were taking indicated that they had been driven from their line of flight by an adverse wind, which having abated they were returning towards land, after having been carried, it may be, a great distance out to sea. The different intonations of the Swallow's cry will tell any one acquainted with their language what is happening to the bird at the time. There is the shrill, unmistakable note of anger as the bird pounces at a dog or cat: one of our tame Hawks used especially to afford a mark for the Swallows to insult as they would stoop over him at less than an inch from his head. Then there is the twitter expressive of satisfaction and pleasure, as the bird is catching the flies in the meadow some genial day, when one can hear the snap of the bill as it closes upon its prey.

When it leaves us the Swallow works southwards by degrees, and is not content until it has reached a great distance from its summer home. The North-African oases will not satisfy it; only a few, young birds of weaker wing, will tarry there; the rest push on still southwards, some speeding across the vast African continent until they reach their winter-quarters in Natal and the Cape of Good Hope. Others going further to the East find their winter home in N.W. India, China, and Japan. Few birds have so great a range between their settlements at the various seasons of the year.

Martin. *Chelidon urbica* (Linn.).

[Houze-Martin : Martlet of heraldry.]

A summer migrant, generally distributed and abundant. Breeds.

The Martin usually arrives towards the end of April, though stragglers are seen much earlier, and in 1874 we saw two on the 2nd, and many on the 5th of that month. In 1891 none were observed by us until 14th May. Martins generally disappear before the last week of October. Young birds are, however, often seen late in November, and have been observed even in December (Exeter, December 20th, 1863) and January (Brixham, January 1st, 1866). Immense numbers congregate about houses near the sea on the South Coast in September and October. Martins breed

under the eaves of houses in Exeter, where they are much more numerous than the Swallows. They also breed on the sea-cliffs, as at Beer, Teignmouth, Berry Head, and Wembury Cliffs at the mouth of the Yealm. (J. G., Zool. 1872, p. 3168.)

White specimens are not uncommon. One from Col. Montagu's collection was in the possession of the late Rev. J. Hellins, who himself once saw one. Another occurred at Seaton. There is a Martin with white quill-feathers from Mr. Ross's collection in the A. M. M. A white Martin was observed for several days flying over the Torridge, near Torrington, in the last week of August 1876. (G. F. M., Zool. 1876, p. 5165.)

To us there are few more pleasant sounds than the soft crooning of the Martins to their young, heard through the bedroom window some bright summer's morning. Although usually content with gnats, and "such small deer," the Martin is prepared to avail itself when chance offers of larger game. Great was our indignation and astonishment one day when entomologizing by the river side to see a fine crimson under-wing moth seized by a House-Martin, as we flushed it from its roost on a pollard willow, the bird appearing smaller than its prey as it carried it off!

House-Martins do not seek such distant winter-quarters as the Swallows, but are content with N. Africa, Egypt, Palestine, &c.

Sand-Martin. *Cotile riparia* (Linn.).

[Bank-Martin.]

A summer migrant, very abundant though local. Breeds.

The Sand-Martin is the smallest of the Swallow family visiting this country, and the first to arrive. It breeds in large colonies in holes in the sides of sand-pits; river-banks; cliffs of the South Coast, where the geological formation is suitable to its habits; old quarries; and in chinks in old walls, especially the masonry of old bridges. When the ground is soft the birds burrow horizontally to a distance of three or four feet, their holes being about the size of mouse-holes. These Sand-Martin burrows are said to abound with fleas, but we cannot remember to have come across any in the numbers we have examined. Both the old and young Sand-Martins when on the wing look as if they had collars round their throats.

This species is sometimes seen as early as the middle of March. In 1856 we saw two and shot one on March 18th (W. D'U., Zool. 1856, p. 5098; Newton, 'Yarrell's B. Birds,' 4th ed. ii. p. 359). "Brown-backed Martins" were seen on March 16th, 1844, near Topsham (F. W. L. R., MS. iv. p. 183). The Rev. Thomas Holmes says:—"Sand-Martins build on the Tamar in great numbers; I have seen them on the river Cary in the early part of March" (Bray's 'Tamar and Tavy,' 1st ed. i. p. 351). "They build in the sandy headlands at Thurlestone Cliffs, near Kingsbridge" (E. M., Trans. Plyn. Inst. 1830, p. 308). At Bantham (R. P. N., MS. Notes). "They breed in small parties on the banks of the River Erme below Ermington; on the Meavy near R.borough Down; and Borough Island at the mouth of the Yealm" (R. A. J., 'Naturalist,' 1851, p. 86). Other breeding-places are the Red-Sandstone Cliffs east of Dawlish; the Sand-pit at St. Mary's Clist, near Exeter; and on Lundy Island. The Sand-Martin is very numerous in North Devon, breeding in all suitable localities.

Family **CERTHIIDÆ**.**Tree-Creeper.** *Certhia familiaris*, Linn.[Climb-tree, Tree-climber, Hood-pecker : *Dev.*]

Resident, common in wooded districts throughout the county. Breeds.

To be met with wherever there are trees; in woods and plantations, in shrubberies, lawns, and parks; there must be few who will not have noticed the tiny Tree-Creeper flitting with rapid motion up the stems of the trees, searching the bark for minute insects, and, after it has completed its investigation of one tree, flying off to another, settling on its trunk close to the ground, and working its way upwards as before. Every now and then the little bird emits a shrill, mouse-like chirp, which is its only song. It presses its stiff tail-feathers well against the stem of the tree, and thus gains assistance as it climbs. Draw near, and it will wind round to the side of the tree out of view, and its brown and mottled plumage so nicely corresponds with the colour of the bark that it can easily escape detection. It has a slender, somewhat curved bill, which is well adapted for picking insects out of the crevices of the bark. Its flight, like that of most birds which seek their living exclusively on the trunks and boughs of trees, is undulating, and it rarely takes a longer flight than from one tree to the next. Although one of our commonest birds its nest is seldom found, being so artfully concealed. The late Mr. T. R. A. Briggs found a nest with young in a hollow between ivy-stems and the boll of a tree by the Yealm between Puslinch Bridge and Kitley Quarry, May 20th, 1871.

Family **FRINGILLIDÆ**.Subfamily *FRINGILLINÆ*.

THE FINCHES.

The large family of the Finches includes some of our most abundant and familiar birds. They all feed upon seeds, grain, buds, and insects, and seek their food equally upon the ground, and in trees and bushes. In the winter they collect in flocks, sometimes of immense size, and are to be met with on the stubbles and around our rick-yards. They mostly migrate southwards in the autumn, the place of those which spent the breeding-season with us being taken by others of the same species which come to us from

the North and East. When they have paired in the spring they scatter over our hedges and plantations, and their lively presence lends an attraction to rural life.

Goldfinch. *Carduelis elegans*, Stephens.

[Gool Finch, Blossom-Bird: *Dev.*]

Resident, formerly numerous, but now rather scarce in most localities, except in autumn. Breeds.

The decrease in numbers of this gay and attractive Finch is to be greatly regretted. Not so many years ago hardly a garden or orchard wanted in the spring a pair of Goldfinches and their beautifully constructed nest; but the ceaseless persecution of bird-catchers, combined with the better cultivation of the land, causing the favourite plants upon the seeds of which it feeds, such as the groundsel, ragwort, and thistle, to have diminished in quantity, has made it quite a rare event to see an example of this once abundant bird. Like many other small birds, as the period of migration draws near, the Goldfinch begins to shift its quarters and moves in flocks along the coast from west to east until it reaches the narrow seas, and finds a short passage across to the opposite coast. This is the time when bird-catchers are on the look-out for it, and in some favourite localities will sometimes catch scores of dozens in a single morning. A large proportion of the miserable little captives perish the first and second days after they are taken, refusing to feed, and beating themselves to death against the wires of their cages.

The Goldfinch is usually met with on canal and railway embankments, in marshes, on commons, and other open spots where ragwort and thistles abound. It has been so constantly trapped by bird-catchers near Exeter that it is now seldom seen in that neighbourhood. Great numbers perished in the severe winters experienced at intervals during the last forty-five years. We remember seeing many caught in the snow of March 1845, near Topsham, and again in February 1853, the birds being too weak to escape.

Bird-catchers still take a good many near Exmouth and Littleham early in October, when there appears to be a large influx into Devonshire. The Goldfinch is fairly numerous at Kingsbridge, though scarcer than it was fifty years ago, although there are no bird-catchers in that neighbourhood, the decrease in numbers being probably owing to the better cultivation of the land, which has rendered thistles &c. less abundant than formerly (R. P. N. and E. A. S. E., MS. Notes). We found it plentiful in October 1873, under the northern slopes of Dartmoor (M. A. M., Zool. 1874, p. 3825). Mr. G. B. Corbin thought it had increased again in South Devon in 1877 (Zool. 1877, p. 444). Mr. W. Crossing informed us in 1889 that he had not seen any for five or six years near South Brent. It was formerly a very common bird in North Devon, but has much decreased in numbers there also.

Siskin. *Chrysomitris spinus* (Linn.).

[Aberdavine.]

A winter visitor of uncertain appearance. Small flocks sometimes occur in severe seasons between Michaelmas and April in South Devon. We have generally found them feeding on the seeds of alders amongst the débris left by the sides of streams after floods following heavy snow. They are usually very tame and easily captured with a fishing-rod smeared with bird-lime for a few inches at the top (cf. W. R. S., Zool. 1849, p. 2385) or a hoop-net (F. W. L. R., Zool. 1845, p. 1191).

Montagu saw a small flock in December 1805 busy extracting seeds from the fruits of the alder trees in the South of Devon (Orn. Dict., Suppl.). Turton and Kingston say that it is "a visitor found occasionally in the neighbourhood of Ashburton, and Cockwood, near Starcross. Three specimens were caught in the summer of 1828 in the marshes near Newton." It is rare near Plymouth. In the autumn of 1836 five were caught in a trap in the lines at Devonport (E. M., Trans. Plym. Inst. 1830, p. 312; Mag. Nat. Hist. n. s. 1837, p. 176; Rowe's Peramb. Dartmoor, p. 232). A few were seen near Plymouth in December 1845 and January 1846. A large flock December 1847 and February 1848 (R. A. J., 'Naturalist,' 1851, p. 44). One killed in February 1853 was the only specimen Mr. Bolitho had sent to him in twenty-one years, 1852-72. Some seen under the Hoe, February 1870. Large flocks on the alder bushes by sides of the Plym, December 17th, 1874, and some March 20th, 1875. Young ones were taken with Goldfinches, September 24th, 1880; and a flock of thirty or forty were seen on the *Larches* in Bickleigh Vale, but their stomachs were full of insects (J. G., MS. Notes, and Zool. 1875, pp. 4371, 4459; 1880, p. 249; 1881, p. 51).

It has only been met with a few times near Kingsbridge. In December 1878 a flock of about thirty were seen, and some about 1880, and in February 1886 (H. N. and R. P. N., MS. Notes).

It is very unusual near Torquay. A pair seen there January 15th, 1870 (Von H., Zool. 1870, p. 2059).

It has frequently appeared in the Exeter district. Flocks occurred in 1845 (F. W. L. R.) and it was very numerous in the winter of 1848-9 (W. R. S., *l. c.*). We met with small flocks near Topsham in 1852-3, February 1855, November 1862, February 1863, and January 1866.

Considering what a common bird the Siskin is all round Taunton in the winter months it is singular that it should be very rarely met with in North Devon, where we know of only one or two instances of its occurrence. In our collection we had one which was secured near Barnstaple. When we resided at Bishop's Lydeard, a little to the west of Taunton, we often had Siskins in our garden, and one day when we had a cage containing some tame Siskins hanging near an open window a small flock actually came into the room to pay our birds a visit. The Siskin makes a delightful cage-bird, being very easily tamed, and may be taught some amusing tricks. We know of no instance of its having nested in Devonshire, but in the neighbouring county of Dorset it seems probable that it does so occasionally. We have heard of mules between a cock Siskin and a hen Canary.

[*Observation.*—An example of the Serin (*Serinus hortulanus*), a Finch closely allied to the Canary, and which has been obtained about a dozen times in the east of England, occurred at Taunton, Somerset, in January 1866.]

Greenfinch. *Ligurinus chloris* (Linn.).

[Green Linnet.]

Resident in part, generally distributed and abundant. Breeds.

Large flocks arrive in autumn, remaining till March. Great numbers visited the neighbourhood of Plymouth during the winter of 1884-5, especially at the Docks where ships were discharging their cargoes of grain. (J. G., Zool. 1885, p. 377.)

In 1854 a Greenfinch's nest was found in the garden at Newport, near Topsham, composed entirely of the downy achenes of the garden anemone, and being from choice sorts was estimated to contain at least ten shillings' worth of seed. In winter we find it extremely destructive to the berries of the Cotoneaster, but it does some good by eating the seeds of dandelion and other weeds.

It also commits many a theft in the kitchen-garden, where it will devour the cabbage and other seeds directly they germinate, unless the beds are protected with nets. A pair of Greenfinches actually placed their nest in some ivy on a wall of our garden, close above our seed-bed, in order that they might be handy to this favourite food. Without possessing anything in the way of song to render it attractive, the Green Linnet is, nevertheless, a very entertaining cage-bird, becoming very tame and fearless, and we have known it to live in confinement for ten or twelve years. It begins to build in April, and nests with eggs may be found up to August.

Hawfinch. *Coccothraustes vulgaris*, Pall.

[Grosbeak.]

A winter visitor of irregular occurrence in small numbers from October to April. It is sometimes seen in breeding-plumage in spring near Exeter, and it has been known to nest near Kingsbridge.

It has been obtained at Plymouth, Kingsbridge, Milton Abbot, Ashburton, Starcross, Exmouth, Exeter, Christow, and Barnstaple. It is an occasional visitor to Lundy Island (Trans. Devon. Assoc. iv. p. 605; viii. p. 309).

"A few years ago a pair of Hawfinches bred in the plantation near Woolston House, Loddiswell. The nest was found containing eggs. They were allowed to hatch. The old birds reared their young, which remained in the neighbourhood through the greater part of the following winter, and were frequently seen during that time" (H. N., MS. Notes). Of this family one old and two young birds were shot, and are in the possession of Mrs. Elliot, Tresilian House, Kingsbridge (E. A. S. E., MS. Notes).

We only know of the Hawfinch as an occasional winter visitor to North Devon, where it is seldom seen before January or February. We often saw it during the winter and spring months in our garden at Bishop's Lydeard, near Taunton, where one spring a pair remained with us for several months, and were very destructive to our rows of peas, but disappointed

our expectations by leaving us without having a nest. In its wild state no other small bird is, perhaps, more readily to be recognized. Its dipping flight, in which the white tips of the tail-feathers are very conspicuous, at once betrays it.

House-Sparrow. *Passer domesticus* (Linn.).

Resident, extremely abundant, and generally distributed. Breeds.

On Dartmoor and its borders Sparrows are, as might be expected, not numerous, food being scarce and human habitations few and far between. But in summer a few visit the lonely farm-houses and cottages and breed about them. According to Mr. J. Brooking Rowe, in the parish of Sheepstor, a small moorland village, about eight miles from Plymouth, it is never seen (Trans. Plym. Inst. 1862-3, p. 63). The Rev. C. H. Crooke, however, says that Sparrows are by no means uncommon there (Pidsley, 'B. of Devonshire,' p. 42). It used also to be asserted that this everywhere too abundant bird did not occur at Withercombe-in-the-Moor, a romantic village situated on the eastern side of Dartmoor. However, Mr. J. Gatecombe soon proved this to be an error, for, on visiting the village in question, the first bird to greet him in the street was the ubiquitous House-Sparrow. It is only an occasional visitor to Lundy Island.

Albinos and varieties with white heads and wings frequently occur. We have seen many white and particoloured specimens in and near Exeter and at Exmouth.

Tree-Sparrow. *Passer montanus* (Linn.).

A casual visitor of rather rare occurrence in the winter months, but it is apparently extending its range westward and becoming more frequent.

In 1830 Turton and Kingston stated that it was rarely seen in Devonshire, and Dr. E. Moore included it in a list of birds which had not been noticed in the county, when he published his paper "On the Ornithology of the South of Devon" in the Trans. Plymouth Institution for that year. Mr. J. Gatecombe found two specimens amongst a lot of small birds exposed for sale in Plymouth Market in March 1857 (Zool. 1857, p. 5592); and another was killed at St. Budeaux on March 20th, 1857, by Mr. Jolley, a friend of Mr. Gatecombe, who recognized it. Mr. Gatecombe also obtained one in Plymouth Market on February 21st, 1860 (MS. Notes). Capt. J. C. Tyrwhitt-Drake shot one at Bicton, near East Budleigh, December 30th, 1862. Three were seen and two shot November 3rd, 1884, by Mr. Burrige, at Worthy, near Kingsbridge (E. A. S. E., Zool. 1885, p. 32, and R. P. N., MS. Notes). Mr. Elliot has obtained other specimens in his district since then, and Mr. R. P. Nicholls, a few years ago, met with a flock in a hedge near Ticket Wood Bridge in winter. Some occurred at West Alvington in October, and some at Milton Ley in December 1890 (E. A. S. E.).

A more dapper, dandified-looking bird than the cosmopolitan House-

Sparrow, this species is very local and is somewhat rare in the Western Counties. In Somerset small colonies are reported as existing at Wiveliscombe, Williton, and Burnham, and we have ourselves occasionally seen Tree-Sparrows in the east of that county. According to Mr. Mansel-Pleydell it is resident at various places in Dorsetshire.

The best distinction between the Common and Tree-Sparrows is to be found in the character of the black scarf worn by the two species. This in the House-Sparrow is sprawling and untidy, widening into a broad crescentic band upon the breast, whereas in the Tree-Sparrow it is neater and better defined, and runs down the throat narrowing to a point. In the Tree-Sparrow there is no difference between the two sexes in plumage, while in the commoner bird the sexes are very distinct. We never saw a Tree-Sparrow in North Devon.

Chaffinch. *Fringilla cœlebs*, Linn.

[Maze Finch, Copper Finch, White Finch or Winch, Silver Winch, Daffinch (*N. D.*), Chink, Pink, Twink: *Dev.*]

Resident, generally distributed, and very abundant. Breeds.

Large flocks of females and young birds are seen in winter, probably immigrants from the North and East.

Of the whole tribe of Finches there is no more determined aggressor of the small seeds and fruit-buds in the garden than the Chaffinch, or White Finch, as it is generally called in the West. But in justice it must be said that by devouring the seeds of various noxious weeds it renders ample compensation for its thefts. The song of the Chaffinch is one of the well-known sounds of spring. First come a few hurried notes, and then the strain, ending in a higher pitch, distinctly seems to syllable "ginger-beer," for which beverage the cock birds may be heard calling all through the day. To bird-catchers the Chaffinch is known by the name of "Battling-Finch;" for a cock placed in a small cage tied to a stick, or exposed on the ground, by his aggressive challenge-notes will draw all other small birds within hearing to approach the limed twigs prepared for their capture. In the summer time the Chaffinch may often be seen flying up from some perch on a tree in pursuit of a passing insect like a Flycatcher. Chaffinches are bold and venturesome, and we have occasionally had them entering our windows and hopping about our floors to pick up the stray seeds which fell from the cages of our various pets.

A very remarkable variety of the male was shot by the late Major George Woods in 1865. The crown of the head and the wings are white, the rest of the plumage being curiously mottled with pink, green, yellow, grey, white, and black. It is now in the A. M. M.

Brambling. *Fringilla montifringilla*, Linn.

A winter visitor of irregular appearance, generally rather scarce, but sometimes abundant near Exeter, Topsham, Torquay, Ashburton, Totnes,

Kingsbridge, and Plymouth. We have seen and obtained many ourselves, and so also have Messrs. E. A. S. Elliot and R. P. Nicholls. During the severe frost of December 1890 Mr. Elliot found a large flock of Bramblings amongst the reeds of Milton Ley, together with Tree-Sparrows, Linnets, &c.

Bramblings were especially abundant in the winter of 1852-53, January and February 1855, November and December 1864, December 1870, January 1871, January 1881, December 1890, and January 1891.

An adult male occurred at Landkey, near Barnstaple, July 20, 1856 (M. A. M., Zool. 1857, p. 5346).

The late Mr. F. W. L. Ross, of Topsham, informed us in 1854 that a pair of Bramblings had bred in his garden, but we are inclined to think that it must have been in his aviary, where he kept many kinds of small birds.

In severe weather we have often observed this beautiful bird in North Devon in company with other Finches crowding the stack-yards, but have never met with it in the great concourses which we have sometimes encountered in Somerset in the neighbourhood of beech trees, the mast of the beech being a very favourite food. We have found Bramblings entertaining cage-birds. At the migration-time they become very restless, dashing themselves to and fro in the cage, and their uneasiness greatly increases towards evening, the time chosen by nearly all birds for their journeys.

Linnet. *Linota cannabina* (Linn.).

[Brown Linnet (in winter); Rose, Fiery, and Red Linnet (in spring):
Dev. Greater Redpole of Montagu.]

Resident, generally distributed and abundant.

Although reported to be becoming scarcer in some parts of the kingdom, owing to the continuous breaking up and enclosing of commons and wastes, we do not believe that the cheerful Linnet is at all decreasing in numbers in the West Country, where furzy patches still abound to provide its favourite shelter. A familiar little bird, with a pleasant song, we should indeed be sorry were it to be banished, and agriculturists might with reason lament it, as it renders good service by feeding eagerly upon the seeds of various injurious weeds.

The adult male in his full spring apparel is an extremely handsome bird, with his forehead and breast of the brightest rose-red; in the autumn moult these brilliant tints disappear and are replaced by wood-brown, and all through the winter the "Brown Linnet," as he may then properly be termed, is a dull and inconspicuous bird, to be met with in large flocks in stubbles and turnip-fields, and often by the sea-side, where the seeds of maritime grasses provide him with food.

The immense flocks seen on the stubble-fields in autumn and winter are probably immigrants from the North and East. They sometimes visit the mud-flats in the estuaries of our larger rivers to feed on the seeds of

Salicornia (J. G., Zool. 1873, p. 3466). Flocks also appear in spring on the sea-coast at Exmouth for a few days. On April 12th, 1890, we saw a large flock of very dark-coloured Linnets feeding on the golf-links there, though there were none to be seen on the previous day. At the same time the resident birds had nests and eggs.

In South Devon the male rarely develops much red on the breast, and we have never seen any in the rich livery it puts on in the East of England in the breeding-season. Mr. R. P. Nicholls observes that specimens obtained on the sea-coast are much brighter than inland ones. Mr. Comyns had a variety with the head white (E. M., Trans. Plym. Inst. 1830, p. 312). Bellamy mentions having seen a specimen with a white ring round the neck (Nat. Hist. S. Devon, p. 204). A pure white specimen was caught in October 1881, and another was shot near Plymouth in 1883 (J. G., Zool. 1882, p. 66, 1884, p. 55). Mr. Henry Nicholls shot one in the spring of 1845 (or 1846) which was pure white, except the breast, which was of a lovely rose-colour (E. A. S. E., MS. Notes).

Mealy Redpoll. *Linota linaria* (Linn.).

A casual visitor of extremely rare occurrence.

The only known instances are not so satisfactorily authenticated as could be desired. Dr. Edward Moore says "*Linota canescens*, rare, one in Pincombe's collection" ("*Passerine Birds of Devonshire*," in Mag. Nat. Hist. 1837, p. 176); and Bellamy, probably following Moore, simply says "very rare."

In their migrations the northern Linnets appear to follow the line of the Eastern Counties, and but very rarely stray towards the west. This remark applies to the Twite, and more especially to the Mealy Redpoll, of which we only know of one Devonshire example, the one we purchased at the sale of the late Mr. Cecil Smith's collection labelled "North Devon." Only one specimen seems to have been obtained in Cornwall, that mentioned by Dr. Bullmore in his 'Cornish Fauna' as having been shot by Mr. Copeland at Carrythenick. This was a male "in full bridal dress." We have ourselves never seen this species either in Devon or Somerset. The two Mealy Redpolls said to have occurred near Plymouth were regarded by Mr. J. Gatecombe as doubtful. It is possible that hoary examples of the Lesser Redpoll have been mistaken for the rarer northern species in these two instances.

Lesser Redpoll. *Linota rufescens* (Vieill.).

A winter visitor, of irregular appearance, principally to Eastern Devon.

This pretty little Finch, a great favourite as a cage pet, is peculiarly a British bird, as it seems to be confined in the breeding-season in its distribution to the British Islands, and is unknown in the northern parts of Europe. But it belongs to our north-country birds, and nests but sparingly in the southern counties, where it is chiefly known as a winter

visitant, making its appearance in September and October, and leaving again for the north in April. In the winter we may meet with it in company with Tits and Siskins engaged in searching alders and birches for food. We have only once or twice seen it in the spring in North Devon, while around Taunton it was far more common, a little flock generally visiting our garden each spring and remaining with us for some weeks. It has been known to nest both in Dorsetshire and Somerset, but is reported as being very rare in Cornwall.

The Lesser Redpoll was numerous near Topsham from September to December 1854, and again in 1862 and 1868. The small flocks which we observed in those years fed exclusively on the seeds of the birch, remaining day after day on the same trees close to our house. Mr. R. Cumming, however, informs us that he has often seen Redpolls near Exeter in winter, and that it feeds on the seeds of the alder.

Dr. E. Moore found it "rather rare" near Plymouth in flocks about alder-trees (Trans. Plym. Inst. 1830, p. 312). Mr. Bolitho received one from Dr. Whipple, of Plymouth, on October 8th, 1859, and this is the only specimen we can find mentioned in his MS. Memoranda of birds sent to him for preservation from 1852 to 1872.

Some occurred in February 1844 at Topsham, and Mr. F. W. L. Ross says "it visits the banks of the river *every season* in small flocks, feeding on the seeds of the rushes washed in by the tide" (MS. vol. iv. p. 10). An old gunner, Richard Hall, however, informed us in 1854 that he had not seen any for thirty years, and then he saw some on the beach at Topsham. The Lesser Redpoll has not been obtained in the Kingsbridge district, but Mr. E. A. S. Elliot thinks he saw some at Milton Ley in December 1890. It is only a chance winter visitor to North Devon. Mr. Howard Saunders, in his 'Manual of British Birds,' p. 183, gives it as "a very local breeder" in Devon, probably on the authority of the Rev. H. A. Macpherson, who "observed an old Redpoll feeding a newly-fledged nestling on the branch of an ash, near Lynton, in July 1879" (Pidsley's 'Birds of Devonshire,' p. 44).

Twite. *Linota flavirostris* (Linn.).

A casual visitor of very rare occurrence in South Devon, where the only known instances are not well authenticated, but not unfrequently seen in the northern part of the county.

It is included in Dr. E. Moore's "List of Dartmoor Birds" in Rowe's 'Perambulation of Dartmoor,' 1st ed., 1848, p. 230; and in his "Catalogue of Passerine Birds of Devon" in 'Magazine of Natural History,' n. s. i. p. 176 (1837), he says: "In Devon, according to Polwhele, in his 'History of Devonshire,' Two in Bolitho's collection." Dr. Moore is followed by Bellamy, Brooking-Rowe, and Parfitt, who say "rare," or "scarce," without giving any particulars as to its occurrence.

Flocks used to visit North Devon in autumn and winter. We have seen them on Northam Burrows and on the side of the North Walk

in the town of Barnstaple. We once killed six or eight Twites out of a flock near Barnstaple. There was a specimen from North Devon in the collection of the late Mr. Cecil Smith.

This common frequenter of moors in the North of England and Scotland, where it is well known as the "Heather Lintie," is far from a common autumnal migrant to the South-west Counties. It has, however, occurred to us in the winter in salt marshes, both in Devon and Somerset, and also on high ground in North Devon. Its longer tail and the rufous patch upon the upper tail-coverts easily distinguish it from the Common Linnet, as well as its yellow beak, and it never, like the other Linnets, assumes any crimson patch upon the breast or forehead.

It is so rare in Cornwall that Mr. Rodd knew of only one example, which was procured in the neighbourhood of Penzance. In Dorset, also, it has very rarely been obtained.

Subfamily LOXIINÆ.

Bullfinch. *Pyrrhula europæa*, Vieill.

[Hoop, Budfinch, Bud-picker, Coal-hood: *D.v.*]

Resident, and numerous in some localities, throughout the county. Breeds.

A frequenter during the summer and autumn months of thick woodland lanes and of copses, the Bullfinch, although generally dispersed, is seldom seen, being of shy and retiring habits. Towards the close of the winter and in the early spring it, however, approaches our residences, and then with mischievous intent. There is no bird whose appearance in the garden more justly excites the fears of the gardener, for a pair of Bullfinches, if uninterrupted, will steadily work through all his fruit-trees, returning day after day to their assault upon the buds, and will only desert the garden and seek another when there are no more left to devour. At this time, with the aid of a hen bird to call and a trap-cage, they are most easily caught, and we have captured upwards of thirty in our small garden in this way in a single winter. Some kind-hearted people, in their desire to defend the Bullfinch, have stated that it only devours buds infested by insects, and in doing so commits no injury; but a ready answer is at hand in the fact that at the time of the year when the Bullfinch attacks the fruit-trees, there are no grubs as yet developed in the buds, and that it is the tender heart of a perfect blossom-bud, as we have ourselves over and again discovered after shooting a Bullfinch in the very act of pilfering, and then examining its gizzard, which the bird is making its food. In the parish books of Dulverton we have read that more than a hundred years ago so much as 3*d.* was paid for every "Hoop" brought in, and this high price is proof of the estimation in which the bird was held as a perpetrator of mischief. In captivity Bullfinches can be easily tamed and taught many

tricks, and are exceedingly docile and affectionate birds—so much so, that in our small aviary we take care never to be without some. Unfortunately, they are short-lived, and we have seldom kept them longer than a couple of years.

The Bullfinch is very destructive to the buds of the pear and the larch in March, and of the beech in May. We saw two fine males feeding on the buds of the hawthorn at Exmouth in February 1890. In the spring of 1855 numerous small flocks were observed near Topsham, but it is not usually common there. It is sometimes plentiful near Plymouth, Kingsbridge, Lydford, Okchampton, Rousdon, &c., especially in oak-copses. It is also common in many places in North Devon.

Mr. Comyns had a variety quite black, and another entirely white, except the breast, which was roseate (E. M., Trans. Plym. Inst. 1830, p. 313). A white male specimen was shot near Totnes in May 1851. The back was slightly tinged with blue and the breast with red (S. Hanford, Jr., 'Naturalist,' 1852, p. 85).

[Pine-Grosbeak. *Pinicola enucleator* (Linn.).

We do not consider the evidence relating to the specimens of this species said to have been obtained in Devonshire to be trustworthy, and in our opinion it should be excluded from our list.

Prof. A. Newton says, in 'Yarrell's British Birds,' 4th ed. ii. p. 178, "Thirdly, is a male example, which the editor is informed by Mr. Byne is in his collection, and that he believes it to have been killed near Exeter in the winter of 1854-55 and brought to his late father, by whom it was preserved." This individual, with the rest of Mr. Byne's collection, passed into the possession of the late Mr. Marsh-Dunn, of Teignmouth, who kindly allowed us to see it in August 1883. It is a male in splendid red plumage, and, as far as we could see through the glass of the case containing it, there is nothing to militate against its having been a British-killed bird. It is nicely stuffed, as are most of the birds in Mr. Marsh-Dunn's fine collection. We do not, however, believe that it was obtained near Exeter, as at the time it is said to have been killed we were living near that city, and giving much attention to the ornithology of the neighbourhood, and were in the habit of recording the occurrence of any rare species that came to our knowledge. We paid frequent visits to the shop of the bird-stuffer named Truscott, who mounted specimens for Mr. Byne, Senr. (then living in Exeter), and he generally showed us any rare birds he had received to stuff. We cannot find any note of the occurrence of a Pine-Grosbeak, nor have we any recollection of such an event, which would most certainly have arrested our attention. We must add that the taxidermist in question had only returned from Canada, where he had been residing for some time, a few years before the date indicated, and had brought home many skins of birds from that country, where the American form is sometimes numerous in winter. In 1869 Truscott stated that he had a Pine-Grosbeak which was shot and stuffed by a gardener at Powderham,

and also that he knew the specimen in Mr. Byne's collection to be British, "as he skinned it himself. It was shot in company with some Crossbills about nine or ten years since by a gentleman in the army of the name of Hooper." After Mr. Byne left Exeter he resided at Milligan Hall, near Taunton, where a specimen of the Pine-Grosbeak is said to have been killed about 1851-52 (C. P., Zool, 1852, p. 3474). This specimen Mr. Henry Nicholls believes was purchased, with other American birds, from a collection which belonged to a Mr. Hellard, which was sold in Taunton. It is "No. 18" of Mr. Gurney's list in his interesting article "on the Claim of the Pine-Grosbeak to be regarded as a British Bird," published in the 'Zoologist' for 1877, pp. 247, 248, and the editor of that Journal, in a footnote, suggests that perhaps it is "the same as Mr. Byne's specimen;" but it is certain it is not so. The ghost is, however, not yet laid, for Mr. E. A. S. Elliot tells us there is a specimen of the Pine-Grosbeak in the possession of a Mrs. Weeks, who was at one time housekeeper to Mr. C. Pridcaux, which is said to have been shot in Brownston Wood, near Kingsbridge, but is more probably "No. 18"! The bird said to have been killed at Powderham we believe to have been a Hawfinch. It is "No. 26" of Mr. Gurney (second article on Pine-Grosbeak, Zool. 1890, pp. 128, 129), who has apparently confused it with Mr. Byne's specimen ("No. 22" of his first article). See our note in the 'Zoologist' for 1890, pp. 183, 184.]

Common Crossbill. *Loxia curvirostra*, Linn.

[Shell-apple.]

A casual visitor of very irregular occurrence at all times of the year. Has bred in the county.

The Crossbills take their name from their singularly formed beaks, in which the extremities of the upper and lower mandibles overlap each other, supplying the birds with perfect cutting-instruments for dissecting apples, fir-cones, &c., and for the purpose of extracting the pips and seeds within, which form their food. They are also remarkable for their singular changes in plumage, which varies from an olive-green to a brilliant red or a bright yellow. They are among the earliest birds to nest, beginning to build in February and having eggs by March. While feeding they keep up a continuous soft twittering, and have very much the gestures of Tits, hanging to the cones on the firs head downwards, and also when holding a cone in their feet they resemble small Parrots. The Common Crossbill has been known to nest on a few occasions only in the South-western Counties.

Flocks were seen in the South of Devon in June 1837, in the winter of 1838-39, and the following spring, June 1848, November 1861, March 1867, July to October 1868, January to March 1869, and a young bird in striped plumage was shot near Budleigh Salterton in September 1889, and was seen by us soon after it had been mounted by Mr. Seaward, of

Exmouth; and an adult was killed at South Brent on 1st November of that year. (R. P. N., *in litt.*)

Mr. Henry Nicholls was walking in the Coombe Royal grounds on June 12th, 1837, when he saw about thirty of these birds feeding on fir-cones. They were very tame (MS. Notes). Mr. W. R. Hall Jordan says Crossbills were very plentiful in South Devon in the winter of 1838-39, and on April 10th, 1839, he saw a nest in a spruce-fir tree at Ogwell House, near Newton Abbot. The male was shot, but the female still continued to attend the nest (Zool. 1843, p. 39; and Trans. Devon. Assoc. vi. p. 710). Turton and Kingston mention that they had frequently shot specimens in the neighbourhood of Ashburton during the summer months. In July 1848 a few appeared at Raleigh House, near Barnstaple, and remained about a week on some Scotch firs. The birds were so tame that an old gardener knocked some down with a stick when they were examining the cones on the lower branches. Many occurred at Topsham in that year, and specimens then obtained are in the A. M. M. from the collection of the late Mr. Ross, who records their occurrence (MS. Journal).

Two specimens were killed near Plymouth by the Rev. R. A. Julian a short time before November 27th, 1861 (J. G., MS. Notes). Several were shot on Chapel Hill, Torquay, in March 1867, and are now in the Torquay Museum, and some are said to have occurred about this time at Alphington, near Exeter, and a male was also shot near Kingsbridge.

There was a simultaneous immigration of Crossbills into Ireland, Cornwall, Devonshire, Somersetshire, and Gloucestershire in July 1868 (Zool. 1870, p. 2235). They were tolerably plentiful at Barnstaple in that summer, and eight or ten were seen and three shot by Mr. A. F. Holdsworth in his grounds at Widdecombe, near Kingsbridge, in July, working on pine-cones (G. F. M., Zool. 1868, p. 1460; and R. P. N., *in litt.*). In August a flock used to frequent the fir-trees at the Moul, near Salcombe, and eight were shot (R. P. N.). In the same month one was shot at Plymouth (E., MS. Notes). In October a flock appeared at Stoke Canon, near Exeter, and several specimens shot there are in the A. M. M. About the same time another flock appeared at Chudleigh.

In January 1869 one was obtained at Plymouth (B., MS. Notes), and some occurred in March at Kingsbridge (Zool. 1869, p. 1721). In November 1869 Crossbills and Snow-Buntings mixed together were seen flying across Lundy Island, and some of both were shot (Zool. 1877, p. 12). The Common Crossbill is stated to have nested once or twice in Somerset.

A large northern race, commonly known as the PARROT CROSSBILL, is an accidental visitor of very rare occurrence in winter. Dr. R. B. Sharpe (Cat. Birds Brit. Mus. xii. p. 439) and other leading ornithologists consider this bird to be merely a large stout-billed race of the Common Crossbill, "not worthy even of subspecific rank," and Mr. Howard Saunders does not give it an independent place in his 'Manual.' This race inhabits the pine-woods of Scandinavia, Northern Russia, and the Baltic provinces, and rarely reaches Devonshire, but one instance only being known. Mr. Newton is stated to have shot nine specimens near Millaton, Bridestowe, in 1838 (E. M., Rowe's Peramb. Dartmoor, p. 232). We have

examined some of these specimens in Mr. Newton's collection, and believe them to be merely the ordinary form of Crossbill (M. A. M.).

In January, 1888, a large flock visited Marley, near Exmouth, remaining for several weeks. Some specimens were shot, which we examined in the flesh, and are undoubted examples of this larger race. Two were in fine red plumage (W. S. M. D'U., Zoologist, 1888, p. 105). Mr. Seaward, of Exmouth, has several still in his possession.

White-winged Crossbill. *Loxia leucoptera*, Gmel.

[Considered by Messrs. Sharpe and Saunders as a subspecies of *Loxia bifasciata* (C. L. Brehm).]

The only instance known of the occurrence of this bird in Devonshire is that recorded by Mr. E. B. Fitton (Zool. 1845, 1190). It was a male in his second plumage, and was picked up dead by Mr. Fitton himself on the sea-shore at Exmouth, apparently just washed ashore, September 17th, 1845. A strong wind from the south-west was blowing, and had continued for several days. This was the second example obtained in England (Proc. Zool. Soc. 1845, p. 91). It had probably had an assisted passage on the rigging of some vessel on its voyage from America to England. An example of the White-winged Crossbill has also been obtained in Cornwall.

Subfamily EMBERIZINÆ.

THE BUNTINGS.

These birds differ from the Finches in having a bony protuberance in the palate of the upper mandible which is received into a corresponding cavity in the lower jaw, and peculiarly fits them for feeding on grain and hard seeds. Only five out of the ten recognized British species of Bunting have been observed in Devon, and of them the Yellow Hammer alone can be considered really plentiful all the year round and generally distributed in the county. The others are of somewhat local distribution or else seasonal visitors. Another species, the Ortolan Bunting, has occurred once at Trescoe Abbey, Scilly, in autumn, but has never been detected in Devonshire. Three more species, the Black-headed, Rustic, and Little Buntings,

which have occurred a few times in the East of England, have not as yet been met with in any of the Western Counties. The Lapland Bunting, an occasional winter visitor to the East Coast of England, is also unknown with us.

Corn-Bunting. *Emberiza miliaria*, Linn.

[Horse-Lark, Bunting Lark.]

Resident, but local, and principally along the coasts. It is nowhere numerous in Devon, except when migrating. Breeds.

It is sometimes abundant on the coast near Plymouth. Bellamy says that it is common, but not so plentiful as the Cirl Bunting, and that it frequents fields close to Plymouth and Devonport (Nat. Hist. S. Devon, p. 204). It was numerous amongst furze-bushes on the cliffs at Bovisand, Aug. 30th, 1873, and many were seen on the walls and hedges near the cliffs at Wembury, July 23rd, 1874 (J. G., Zool. 1873, p. 3719; 1874, p. 4228).

It is common, and breeds near Kingsbridge, more particularly on the sea-coast. (R. P. N., MS. Notes.)

Turton and Kingston found it frequent in various parts of their district (Teignmouth, Torquay, Ashburton, &c.).

In the neighbourhood of Exeter, according to our own experience, the Corn-Bunting is quite scarce. One was shot at Topsham, July 1844 (F. W. L. R., MS. iv. p. 117). A buff-coloured variety was obtained in February 1875 at Alphington, near Exeter, and was seen by us in the flesh.

This, the largest of our English Buntings, is very inconspicuous in plumage, which in its sober russets not a little resembles the garb of the Sky-Lark, whence the bird is called by some the Bunting Lark. It is rather solitary in its habits, except during the winter months, so that it is unusual to find more than a pair in one locality. In North Devon it is very local; a few frequent the high ground above Ilfracombe, and we have seen it on the Braunton Burrows and at Instow. We have ourselves never met with this Bunting in flocks in the winter time anywhere in the Western Counties. From its habit of taking its station on some high twig in a hedge-row, whence it utters its few harsh notes, it is easily to be detected where it occurs.

In Pembrokeshire, also, we have noticed that the Corn-Bunting is a bird of the coast, being very plentiful in the St. David's district, while it is very rarely seen a few miles inland.

Yellow Hammer. *Emberiza citrinella*, Linn.[Gladdy, Gladie, Gladdie, Golden Gladdy, Yellow Yowley : *Dev.*]

Resident, generally distributed and abundant. Breeds.

The Yellow Hammer is one of the best known, and is also one of the most abundant of our indigenous birds, as it is one of the gayest in plumage. Its bright yellow crest and throat and underparts of the same attractive colour render it very conspicuous, as it sits on some prominent perch in the hedge-row, pouring forth its lively, but unmusical song, which it continues all through the hottest and most sultry weather of the later part of the summer. When most other birds have hushed their notes, this merry bird still continues his simple ditty, which has been rendered in English words as "a little bit of bread and more cheese," and enlivens the moorlands when they are bright with golden furze and harebells, and it is associated in our memory with many a summer ramble. It is easily tamed as a cage-pet, and one we had for several years was permitted to fly about the room, when it would frequently perch on the back of our dog or cat lying asleep before the fire, receiving from both animals tender treatment.

A lutino variety of a canary-colour occurred on Dartmoor, September 23rd, 1876. A similar variety from Devon was in Mr. F. Bond's collection (*J. G., Zool.* 1876, p. 5146; 1877, p. 44).

Cirl Bunting. *Emberiza cirlus*, Linn.[French Yellow Hammer : *Dev.*]

Resident. It is rather local, but common in some places on the south coast, and near Barnstaple in the north of the county.

The Cirl Bunting was first observed as a British bird by Col. Montagu at Kingsbridge, South Devon, in 1800. In the following year he found it breeding in Devon, and communicated an account of the mode by which he successfully reared the young to the Linnean Society (*Trans. Linn. Soc.* vii. pp. 276-280).

It is numerous in N. Devon, around Barnstaple especially, where we have observed that it is a shier bird than the Yellow Bunting, and is fond of concealing itself in the spring and summer in thick hedges, where it creeps about out of sight at the bottom, and where its presence can only be detected by the sibilant call-note, which closely resembles that of the Robin. When we have heard this note we have waited patiently until the male bird has hopped up the twigs in the hedge, when he will show himself for an instant, and then plunge back into its leafy depths. Both in the spring and again in the autumn the male bird is often to be seen perched on a branch of some hedge-row elm, from whence he delivers his very unpretending song.

Mr. J. Gatecombe has recorded that he heard a Cirl Bunting singing

near Plymouth on 5th December (Zool. 1874, p. 3909). Mr. T. R. A. Briggs heard it on 29th December, 1879.

Mr. E. H. Rodd considered its song bore some resemblance to that of the Wood-Wren.

“The Cirl Bunting is found, but always near the sea-coast; there it remains all the year, and changes its plumage in the autumn, so as to become more like the Yellow Hammer; some, however, come over from the continent in the spring, as they are then found in greater numbers than in winter” (T. J., Bray’s ‘Tamar and Tavy,’ vol. i. p. 350).

It is a common bird about Plymouth (T. R. A. B., Zool. 1873, p. 3774). It was plentiful near Kingsbridge in the spring of 1887 (E. A. S. E., MS. Notes).

During the winter of 1843, the Cirl Bunting was very abundant in the neighbourhood of Exeter, and several were procured, but during the following winter none were to be seen. (W. R. S., Zool. 1845, p. 983.)

It has been frequently obtained at Teignmouth, Torquay, and Ashburton, and we ourselves have seen it at Lidford, Seaton, and Exmouth. In the winter months this Bunting associates with other small birds about farm-yards &c. We saw some feeding in our field at Exmouth, December 21st, 1890, after a heavy fall of snow, with a flock of Larks which had just arrived from the eastward.

Reed-Bunting. *Emberiza schœniclus*, Linn.

Resident, but not very common. Breeds.

A generally distributed species, but nowhere numerous, the Reed-Bunting will be found in pairs by the side of streams, especially where there is any growth of reed or sedge, by swampy hedges, and in osier and alder beds. It is never met with in flocks, and is rather a shy bird, never venturing near houses. The male has a few monotonous notes, hardly worthy of the name of a song. He is a gay-looking fellow, with his black head, white collar, and russet back.

In the immediate neighbourhood of Plymouth this species is not at all common, but some were seen there February 3rd, 1875 (J. G., Zool. 1875, p. 4448). It is also not very abundant in the Kingsbridge district, but occurs about the various Leys, and many examples were obtained in the spring of 1879 (R. P. N. and E. A. S. E., MS. Notes). The Rev. Thomas Johnes says it is found on the reedy banks of the Tamar below Morwell Rocks (Bray’s ‘Tamar and Tavy,’ vol. i. p. 350). Turton and Kingston found it in meadows near Ashburton, Bradley Meadows, near Newton Abbot, and on Bovey Heathfield. It is pretty numerous in the Clyst and Exe marshes near Topsham; also near Axmouth.

The Reed-Bunting is not uncommon in North Devon, where it is to be seen all the year. It is said to be a winter visitor to Lundy Island. (Trans. Devon. Assoc. viii. p. 308.)

A fawn-coloured variety is in our collection. (M. A. M.)

Snow-Bunting. *Plectrophenax nivalis* (Linn.).[White Lark : *Dev.*]

A winter visitor of irregular occurrence.

This species is sometimes met with as early as September, and remains rarely as late as April and May. It occurs most frequently near the coasts, more especially in the north of the county.

The Snow-Bunting, and another species of far rarer occurrence in this country, the Lapland Bunting, form a good link between the Buntings and the Larks, as they possess the elongated hind claws of the true Larks, with the hard conical bill with its cutting palatal knob of the Buntings. About the end of October the Snow-Bunting is to be met with in flocks on high grounds, and is a frequent winter visitant to the South-western counties. When the flocks first arrive they are in a dingy yellow and black plumage, in which garb they received from the older ornithologists the name of the Tawny Bunting. As the season advances the yellow gradually disappears, the edges of the feathers wearing off, and black and white are left as the sole colours. The Snow-Bunting in this plumage was the Mountain Bunting of Montagu. Some specimens we shot on Lundy in January had become pure white below, with a slight concentric mark on the breast of flame-colour, and dusky yellowish white on the back; on raising the latter feathers slightly it can be seen that they are all black, with the exception of a dusky white fringe, which becoming gradually abraded the bird is left with the glossy black back it assumes in the spring. The changes of plumage in the Snow-Bunting are very interesting, and afford a good example of the manner in which, in most small birds, the transition from the plumage of one season into that of another is effected, not by the shedding of old feathers and the production of new, but by the growth of the old feathers from within outwards, and the gradual wearing off of their edges. We have some very beautiful examples of the Snow-Bunting shot by the late Mr. Vingoe in April, on some sand-hills near Penzance, in the complete summer garb with the exception of the bill, which, strangely, never becomes black until the bird arrives at its summer home in the north. Our examples, like those in all stages of plumage obtained in the south, have still the yellow beaks of the immature birds. We ourselves never met with the Snow-Bunting either in autumn or winter on Dartmoor, whose high plateau is entirely avoided by the flocks of migrating birds.

Some Snow-Buntings occurred near Plymouth in October 1851, November 1852, March 1853, December 1864, November 1872, September 1880, November 1881, November 1886 (R. A. J., 'Naturalist,' 1852, p. 7; J. G., *op. cit.* 1853, p. 84, and 'Zoologist,' 1873, p. 3309; 1881, p. 51; 1882, p. 65; 1886, p. 378; B., MS. Notes). A specimen in perfect summer plumage was killed by a boy with a stone under the Hoe, Plymouth. April 23rd, 1868 (J. G., MS. Notes).

The Snow-Bunting is not unfrequent in autumn and winter on Dartmoor (J. B. R., MS. Notes). Turton and Kingson observed it several successive winters on Ashburton Down.

Montagu obtained a male near the Start, 20th October, 1802 (Orn. Diet., Suppl.).

Several specimens have occurred in the neighbourhood of Kingsbridge (H. N. and

R. P. N., MS. Notes). The late Mr. J. Elliot shot a beautiful male near Sorley in October 1841, and his son Mr. E. A. S. Elliot shot a young bird on the cliffs at Thurleston, November 18th, 1885 (MS. Notes). An adult was shot by Mr. Luskey, November 8th, 1849 (H. N.). A mature bird was shot October 29th, 1869, near Ilsbam Farm, Torquay (Von H., Zool. 1870, p. 1983).

Several specimens have been obtained near Exeter and on Haldon (W. R. S., Zool. p. 2385). The Snow-Bunting is not unfrequent on Dawlish Warren in winter, and four were shot there on 10th and 11th April, 1867, in nearly perfect summer plumage, by Messrs. R. Taylor and Cecil Smith (Zool. 1867, p. 832; and 'Birds of Somerset,' p. 158). It is also sometimes seen at Exmouth in autumn and winter in the state of plumage in which it was known as the "Tawny Bunting."

We observed one close to Barnstaple for more than three weeks in January 1858, which frequently pitched on trees and bushes (M. A. M., Zool. pp. 6015, 6208). Although some English ornithologists doubted this fact, we can affirm that we have often seen flocks of Snow-Buntings sitting on trees and bushes in Canada (W. D'U.). Mr. G. F. Mathew met with a large flock feeding in a stubble-field early in the autumn of 1863 between Barnstaple and Ilfracombe, and three of them in different stages of plumage were killed at a single shot (Zool. 1863, 8845; and 'Naturalist,' 1866, p. 358). The Snow-Bunting is sometimes met with on Northam Burrows in October (Zool. 1870, p. 2025). A female with well-developed eggs in her occurred on Lundy Island at the end of May 1858 (M. A. M., Zool. 1858, p. 6015). Some specimens were shot there in November 1869 (Zool. 1877, p. 12).

Family STURNIDÆ.

Starling. *Sturnus vulgaris*, Linn.

[Stare, or Steer, from the cry.]

Resident throughout the county, except on Dartmoor and its borders, where it is an autumn and winter visitor. It has greatly increased in numbers in Devonshire since about 1844, and now breeds in the south-western portion of the county, where less than forty years ago it was only known as a winter visitor. It breeds freely under the eaves, in chimneys, and in rain-shoots of houses in and near Exeter; in holes in the masonry of railway-bridges and viaducts; in hollow trees in woods; amongst ivy; in holes in walls; and in the cliffs of the sea-coast. Hundreds breed in the walls of the trenches of the fortifications at Devonport (J. G., *in litt.*). Vast flocks are seen on the marsh-lands in the winter months, and there is a large immigration from the eastward in autumn and winter. Thousands die in severe winters—as at the beginning of January 1871, and February 1888.

This bird has now become a terrible pest to the fruit-grower, being most destructive to cherries, pears, apples, &c., and it is so bold and fearless that it cannot be scared away.

Polwhele (1797) says that Starlings never breed in the county. Dr. Moore (1830) remarks on this bird:—"Common here (Plymouth) in winter; arriving in flocks in October, and departs in spring; but some of them have been known to breed at Haldon, the seat of Sir Lawrence Palk. Mr. Comyns has a specimen entirely white" (Trans. Plym. Inst. 1830, p. 313). Turton and Kingston (1830) say it rarely breeds in their district

(Teignmouth, Torquay, &c.). "Two pairs have bred in the avenue of Indio, near Bovey Tracey, for the last two years." Bellamy (1839) says it "breeds in some few spots in Devon" (Nat. Hist. S. Devon). It was breeding plentifully enough near Topsham in 1846 to our own knowledge (W. D'U.). The late Mr. T. R. A. Briggs saw a flock of about a dozen at Manadon, May 9th, 1854, and his father saw a pair going in and out of a hole in an ash tree there, May 12th, 1860. A pair were breeding at Lee Hill Bridge, June 7th, 1864. Mr. J. B. Rowe (1863) says "in the south, formerly in the winter only; but recently many pairs have been known to breed" (Trans. Plym. Inst. 1862-3, p. 65). The late Mr. J. Gatcombe informed us that even in 1873, when he wrote to us, young Starlings were quite a puzzle to many of the bird-stuffers at Plymouth. In the Kingsbridge district Starlings only commenced breeding a few years before 1860 (R. P. N.). This sprightly bird is very numerous in the Exeter district, breeding in the holes in trunks of trees, and in the shoots which carry off the rain-water from the roofs of houses. Many pairs bred at our house near Topsham, and were very troublesome to us, filling up the heads of the pipes with masses of straw and other soft substances, and though after every heavy rain in the breeding-season some of the callow young were drowned in the nests, yet the old birds persisted in building in the same situation year after year, until we were compelled to exclude them by means of wire caps over the shoots. With us also they frequently came down the chimneys into the bedrooms, bringing down a mass of soot with them, a very unpleasant habit. The Starling's eggs ought to be of a delicate light blue, but we have often found them quite dingy from the soot washed into the nest by the rain, or accumulated in the plumage of the chimney-loving parents, who seem to "sleep black" like the sweeps.

In June 1872 a large flock of Starlings frequented the trees round the cottage at Becky Falls, near Manaton; an unusual sight for the time of year. None nest very near there. They appeared to be attracted by the quantities of caterpillars which had stripped the oak trees of their leaves. They must have left their breeding-places in flocks like Rooks. (W. W. B., *in litt.*)

The reed-beds at Slapton Ley are a great resort for Starlings in autumn and winter. The numbers roosting there are enormous, and form quite a feature of the place (E. A. S. E.). Polwhele mentions their roosting there; and Westcote speaks of vast multitudes roosting in the few straggling elders which grew on Lundy Island. Hundreds roost in ivy-covered walls and in shrubberies in and near Exeter, and the south of the county, in winter, their strong Cormorant-like odour and uncleanly habits rendering them unwelcome neighbours, and necessitating wholesale destruction.

Fifty years ago the Starling was looked upon as only a winter visitor to N. Devon, and we can well remember when the early appearance of the flocks in the autumn was considered a sign of a severe winter. The enormous increase of this very useful bird during the last quarter of a century is one of the facts of our West Country ornithology. The good it does in clearing the pastures of grubs and worms is incalculable.

In the fruit-season, however, it is an unwelcome visitor to gardens, and is very fond of cherries, soft-fleshed early apples and pears, and of the ripe berries of the elder, which prove an irresistible dainty. It is also said to eat the berries of the ivy, but we have never seen Starlings feeding on them. Flocks may be seen feeding on sand-hoppers on the seashore in autumn, digging them up from a considerable depth in the sand. After severe winters we have found the rabbit-earths sometimes choked with dead Starlings, the birds having crept into them for shelter. It is a proof of the Starling's being unknown to nest in Devonshire at the beginning of this century that even Col. Montagu was puzzled by a young Starling in its first plumage, and actually described it under the name of "the Solitary Thrush." When immense flocks of Starlings congregate in the winter their extraordinary aerial evolutions as they are on their way to their roosting-places are as well worthy of observation as those of the multitudes of Dunlins, Ring-Plovers, and Sanderlings when they wheel over the sand-flats. Sometimes the flock suddenly contracting will take the shape of a monster balloon, and, again, suddenly expanding out into a gigantic ribband, the birds rush on with great velocity, the swish of their wings being audible at a considerable distance.

In bright warm weather in spring and summer, when the air is perfectly still, Starlings may be seen hawking for and chasing flies through the air, like Swallows, and soaring on extended wings, especially about the cliffs of the sea-coast, and often mingled with the Jackdaws, which also have the habit of soaring about in the air for hours together.

We have once or twice seen albino Starlings, and it seemed as if the other birds were proud of them and guarded them, as they were invariably in the centre of the flock, when it was feeding on the ground, so that our efforts to obtain a shot at the variety would be baffled by this caution on the part of the birds.

The Starling was still pushing to the west and settling itself in Cornwall long after it had made itself familiar throughout Devon. It was not till the spring of 1855 that it was known to breed in Cornwall, and then only one pair nested at Trewardale, near Bodmin, increasing to five pairs in 1864 (J. R. Collins.) Even up to 1878 Mr. Rodd stated he had not succeeded in marking it as a resident west of Truro. It is now, we believe, established as a resident bird throughout Cornwall.

In Mr. Byne's collection there was a cream-coloured specimen obtained in Devon. Varieties often occur near Kingsbridge (E. A. S. E., MS. Notes). There is a specimen with the upper mandible curved to one side, in the A. M. M., which was shot near Exeter. Mr. Gatombe saw a bird entirely of a "beautiful glossy black" amongst some Starlings near Plymouth, on April 15th, 1873 (Zool. 1873, p. 3566). A specimen of the Southern Cow Bunting (*Molothrus sericeus*) was shot when feeding with a flock of Starlings at Polsloe, Exeter, December 7th, 1872. It was, doubtless, an escape, many of that species being imported to England from S. America (Zool. 1873, p. 3411).

Rose-coloured Pastor. *Pastor roseus* (Linn.).

A casual visitor, of rather frequent occurrence, principally to the South Hams and to Lundy Island, during the spring and summer months (May to October). It was especially numerous in the fine summer of 1851, when a female was shot at Berry Head which was full of eggs, and might, perhaps, have bred in the county if she had not been killed. If unmolested this beautiful bird would probably become a regular summer migrant. One was shot at Teignmouth, July 17th, 1817 (T. & K., and W. R. H. J., Zool. 1843, p. 188). Two specimens were sent to the British Museum from Aveton Gifford by the Rev. B. Kerr Vaughan, and another was shot there in June 1834. The last specimen is probably the one now in the collection of the late Mr. J. Elliot, at Kingsbridge, but which was formerly in Mr. Vaughan's possession (E. A. S. E.). Another bird in the British Museum was obtained by Dr. Tucker at Ashburton. It has been seen at Saltram (E. M., Mag. Nat. Hist. 1837, p. 176, and Rowe's Peramb. Dartmoor, Appendix, p. 233). A male was shot near Berry Head in June 1845 (E. B., Zool. 1851, p. 3233, and Von H., Zool. 1874, p. 3908). One was shot in the parish of Bigbury in 1850 (H. N., MS. Notes). An adult female occurred at St. Budeaux, or Tamerton, near Plymouth, June 17th, 1851 (R. A. J., 'Naturalist,' 1851, p. 211; J. G., MS. Notes; J. B. R., Trans. Plym. Inst. 1862-63, p. 65). An adult male was shot at Pitt, near Chudleigh, June 18th, 1851 (Zool. p. 3233), and is now in the A. M. M. One recorded from Chudleigh, July 10th, 1851 (W. T., 'Naturalist,' 1852, p. 19), was perhaps the same as the last specimen. A female full of eggs was shot at Berry Head, July 12th, 1851, and is now in the Torquay Museum (E. B., Zool. p. 3233). An adult male shot at Kingsbridge in 1852 is in the A. M. M., and another occurred at Alphington near Exeter in July of that year. A fine male was shot in July 1855 on Highhouse Farm in the parish of Dodbrooke, adjoining Kingsbridge, by Mr. H. Nicholls, and was purchased by Lord Lilford (H. N., MS. Notes). Lord Lilford describes this bird as a singularly fine example, as brilliant in plumage as any he had ever obtained on the continent. A male in full plumage was seen near Prawle Point in May 1871 (Zool. 1871, p. 2679). One was obtained in the neighbourhood of Bideford at the end of October 1875 (M. A. M., Zool. 1875, p. 4720). One occurred on Lundy Island a few years before 1866 (G. F. M., 'Naturalist,' 1866, p. 359).

The Rev. H. G. Heaven used to say that any year he could confidently expect to see Rose Pastors on Lundy in the spring, and going out actually shot a pair for his friend Dr. Woodforde, of Taunton. Since the island has been almost entirely broken up for cultivation, and, in consequence, is much more disturbed than it used to be, Rose Pastors, Golden Orioles, and other scarce migrants are now seldom seen. We have known several instances of the occurrence of the Rose Pastor on the N. Devon coast. Mr. W. Brodrick obtained one near Ilfracombe at the time he resided in that picturesque watering-place, and we knew of another which was shot

in a garden at Bideford by Mr. Willeocks, who kindly showed it to us. This was a fine male, shot in the autumn of 1875 while feeding on some hawthorn berries in company with Blackbirds. Although Col. Montagu described it as a "beautiful species of Thrush," and gave it the name of the "Rose-coloured Ouzel," in the parts of the world where it commonly resides the Rose Pastor has very much the habits of our familiar Starling, assembling in vast flocks, being fond of the society of cattle (hence its name of Pastor or herdsman), and building together in holes of rocks and old buildings. It is about the same size as a Starling, although the crest upon the head gives it the appearance of being a little larger. Unfortunately the beautiful rose-colour in the plumage of this very handsome bird is very evanescent, quickly fading in skins and mounted specimens.

The Rose Pastor occurs often in Cornwall, as many as seven or eight having been procured in one season in the neighbourhood of Penzance.

In the Eastern Counties Mr. Stevenson has recorded that most of the Rose Pastors are met with in the autumn, whereas on our S.W. coasts the summer months have yielded the greatest number. This renders it likely that small flocks arrive in the S.W. Counties in the spring, gradually scattering themselves eastwards. It rarely happens that single specimens are recorded in any one year, the rule being that, if one has been procured, several others will be met with in various parts of the kingdom, these being some of the other members of the flock, the survivors not reaching the east of the island until the autumn months.

The Rose Pastor may be even a more common visitor than is generally supposed, for, as Dr. Saxby has remarked in his 'Birds of Shetland,' in the plumage of its first year it is so unattractive, and so closely resembles a young Starling in the nestling dress, that in a flock of those birds it might easily escape notice. The fact that these birds are sociable at the nesting-time makes it difficult for us to credit that single pairs have had nests in this country.

Family CORVIDÆ.

THE CROWS.

The important family of the Corvidæ, or Crows, has been, until very recent years, well represented in Devonshire. Comprising some of our most familiar birds, such as the Rook, Jackdaw, Carrion-Crow, Magpie, and Jay, which are generally distributed and common in most parts of the kingdom, it also includes some rarer British representatives, such as the Cornish Chough and Raven, very characteristic in former years of our West Country

ornis, but now, owing to persecution, in great danger of becoming ere long extinct. The Raven is such a powerful, wary, and hardy bird, that he is likely to survive for some years to come, although his numbers annually diminish; but the Cornish Chough is, we fear, within measurable distance of complete disappearance from our county list. The Crows are all wary, sagacious, and powerful birds, furnished with a pickaxe of a beak, which in the Raven is indeed a formidable weapon. They may be termed omnivorous, as there is hardly anything which they can swallow which they will not digest, and they are ubiquitous in their search after food, being met with on moors, in meadows, in woods, by the banks of inland streams and rivers, as well as on the sands and oozes and on the cliffs by the sea-shore. One of them, common in the North, and on our eastern coasts in the winter time, the Royston or Hooded Crow, was, in our memory, a regular visitor in the autumn to our shores, but from causes which can only be surmised has deserted the West of England, and is to-day only a very rare straggler.

Chough. *Pyrrhocorax graculus* (Linn.).

[Red-legged Crow.]

Resident in small numbers in some places on the north coast of the county, but it no longer breeds on Lundy Island, where it was once plentiful. On the south coast it is now hardly more than a casual visitor of rather rare occurrence, though it has been known to breed once or twice. The only instance in which, to our knowledge, it has been met with far inland is one that was seen by Miss Radford near Lydford about 1881. It was, probably, passing from one coast to another across the county.

The history of the Devonshire Choughs during the last few decades is indeed a sad one. While the birds were gradually diminishing from some unexplained natural causes, perhaps owing to the Jackdaw having become the dominant species, their final disappearance has been rapidly accelerated through the greed of collectors for their eggs and skins.

On Lundy, where thirty years ago we found Choughs fairly numerous, and confining themselves to the neighbourhood of the dwelling-house for

the sake of seeking protection from their enemies the Peregrines, we are informed that the birds are now no longer resident, and are only represented by a chance straggler from the mainland at long intervals.

At Abbotsham, on the north coast, where we can remember Choughs being numerous and nesting in some old chimneys, we are told that none have been seen for years. And the same sad tale is repeated from other old haunts of the bird. In the romantic neighbourhood of Lynton, on the bold promontory called Countesbury Hill and in the Valley of Rocks, on most of the cliffs which stretch westwards from Ilfracombe to Baggly Point, especially at Croyde and Morthoe, we used formerly to see the Chough; and, again, on the opposite side of Bideford Bay along the cliffs towards Clovelly and Hartland Point, and, turning that headland, the slaty cliffs of North Cornwall, used to afford them a home, and their presence added to the wildness of the scenery at Boscastle and Tintagel. We have reason to believe that a pair or two are still to be found in some of these old stations, although we must mournfully confess that Choughs were no longer to be seen on some of them which we have recently visited.

In South Devon Mr. E. A. S. Elliot informed us that Choughs used to frequent the cliffs at Prawle Point and Bolt Head, and nested there, and Mr. G. F. Mathew saw them in those localities when searching for *Lycena arion* in the summer months. We have no information as to the presence of the Chough on the cliffs between Exmouth and Sidmouth. In the course of many visits we have never detected it on that part of the coast. Further east, Mr. J. E. Harting found Choughs nesting on the Dorsetshire coast near Lulworth, and Mr. Mansel-Pleydell thought they were increasing in his county, and says that they have returned to their old quarters on the Purbeck cliffs, whence they had been driven by persecution.

The Chough is easily to be distinguished from the Jackdaw when in the air by its longer wings and more buoyant and skimming flight. It feeds on insects, worms, sometimes on carrion, rarely on grain. In the winter Choughs come inland for some little distance, and may then be seen walking about in the fields, although Col. Montagu supposed, erroneously, that they were averse to walking on turf. We know of six having been killed at a single shot when feeding on a manure-heap at Braunton by a sportsman wishing to discharge his gun before returning home. This was long ago in the muzzle-loading days. In the severe winter we spent on Lundy Island we noticed Choughs picking the bodies of the starved Sky-Larks and Redwings.

Choughs are easily tamed, becoming very impudent and familiar. We remember one, taken out of a nest at Abbotsham, which was allowed to have the run of Bridge Street, Bideford. It belonged to a family inhabiting one of the houses, and was the general pet of the whole street, flying in and out of the different windows in turn.

Mr. J. Gatecombe has stated that a tame Chough learned to imitate exactly the call-note of a Canary.

The late Mr. Ralph Sanders, of Exeter, for many years kept a small

flock in his garden in Colleton Crescent, all having been reared from young ones obtained on the coast of Cornwall. Several of these birds are preserved in the A. M. M. and other collections. He informed us that his Choughs attempted to build several times, but never really nested, and he felt pretty confident that they never laid an egg, and that he had some doubts at the time whether any of them had even mated, and whether the carrying sticks did not proceed more from their restless disposition than anything else. When we saw them in 1853 they were extremely tame and fearless, and the little flock had a remarkably pretty appearance wandering about in a body.

In a manuscript Note-book of Col. Montagu, lent us by the late Rev. John Hellins, under date 1798, he says, "The Chough is frequent on this coast (S. Devon) where the cliffs are high." Dr. E. Moore says in 1837 it was not so numerous as in Cornwall, but many specimens occurred in winter (Mag. Nat. Hist. n. s. i. p. 176). It appears to occur occasionally in autumn and winter on the coast in the neighbourhood of Plymouth (Zool. 1879, p. 114; 1880, p. 47; 1881, p. 5; 1885, p. 21). Mr. Bolitho had specimens sent to him for preservation January 20th, 1853, April 20th, 1855, and September 12th, 1864. The late Mr. J. Gatecombe wrote as follows:—"July 16th, 1873. My friend, Mr. Bignell, of Stonehouse, told me that he had seen a family of six Cornish Choughs at the Bolt Head, near Salcombe, on the Devonshire coast, and the same gentleman having observed a pair of these birds a month or two before at the same place, I have no doubt that they had bred and brought out four young ones, which would account for the family of six seen on the second occasion. Bolt Head is, I think, quite a new locality for the Cornish Chough" (Zool. 1873, p. 3717). Mr. R. P. Nicholls says that about a dozen specimens have occurred between the Bolt Head and Bantham in twenty-five years (MS. Notes). Specimens killed near Torquay and Kingsbridge are in the Torquay Museum, where also are preserved two eggs found at Berry Head in 1880. Mr. F. Pershouse, Jr., found a dead Chough lying on the sands at Paignton on January 8th, 1880 (Trans. Devon. Assoc. xii. p. 91). One was shot at Kingswear about 1881 after a gale (H. Balfour, *in litt.*). A pair were shot at Folly Cliffs, Bantham, about 1885 (E. A. S. E., MS. Notes). Half a century ago Choughs were always to be seen on any part of the north coast between Lynton and Hartland Point, the cliffs at Abbotsham being a favourite locality. A few are still sometimes met with in certain localities, as at Braunton Burrows, Morthoe, and Langleigh Cleave, near Ilfracombe. A few were seen at Morthoe in August and October 1874 (Zool. 1874, pp. 4229, 4254). A flock of seven was seen by Mr. J. Gatecombe on Braunton Burrows, October 25th. 1875 (Zool. 1875, p. 4718). Mr. O. V. Aplin saw six flying about the cliffs at Little Ilngman on August 16th, 1886 (Zool. 1887, p. 71).

Nutcracker. *Nucifraga caryocatactes* (Linn.).

An accidental visitor of rare occurrence.

The Nutcracker is an inhabitant of Northern and Central Europe, preferring mountainous districts and pine-forests, where it feeds on the seeds of the fir-cones, and is only an accidental straggler to this country. It is about the size of a Jackdaw, brown in colour, and is speckled all over with triangular spots of white. It is such a singular-looking bird, in consequence of this spotted plumage, that it is easily to be detected, and can hardly be confounded with any other bird when seen close at hand, and it is for this reason that we are disposed to accept the

numerous instances in which this bird is stated to have been seen and not obtained, although in the cases of other birds it would be incautious to do so. We ourselves one day towards the end of the summer of 1873 are confident that we saw a Nutcracker when riding down the beautiful stretch of the Bridgwater and Taunton Road which passes through Cothelstone Park. A bird which was at once perceived to be a stranger was perched upon a post at a short distance from the road, and its speckled back and breast revealed to us what it was. Mr. Austin, the Bridgwater correspondent of Col. Montagu, saw a Nutcracker near Bridgwater upon a Scotch fir in the autumn of 1805. Mr. T. Cosmo Melville in the 'Field' of August 16th, 1873, writing from Maunsell House, near Bridgwater, about the same date that we saw the Nutcracker mentioned above, stated that one was seen by himself and friends near North Petherton. And we know of yet another Somerset Nutcracker, for in a collection of birds belonging to the late Capt. Tomline, of Rumwell House, near Taunton, we saw one which we were informed by him had been shot close to Bath.

A specimen was shot in North Devon in August 1808, which was preserved in the collection of Mr. Comyns, a gentleman who resided at Mount Pleasant, Starcross, and had a large collection of birds (Montagu, Orn. Diet., Suppl.). This collection was dispersed sometime between 1837 and 1848. Another Nutcracker was killed at Washford Pyne Moor, near Tiverton, by Mr. W. Tucker, of Dawlish, in 1829 (E. M., Mag. Nat. Hist. 1837, p. 179). Dr. A. G. C. Tucker mentions this species in his 'List of Birds discovered in the neighbourhood of Ashburton,' and his sons include it in the "List of Birds of the District" in Carrington's 'Dartmoor.' Bellamy also says he believed it had been killed on Dartmoor (Nat. Hist. S. Devon, p. 201). One was seen on the banks of Hooe Lake, in the parish of Plymstock, by the late Mr. Thos. Bulteel (E. H. Rodd, Yarrell's B. Birds, 2nd ed. ii. p. 127). Mr. J. Brooking Rowe thinks he saw one in the woods at Saltram in October 1862 (Trans. Plym. Inst. 1863). One was seen by Mr. M. H. Rotheram on July 14th, 1883, in Huntsham Woods, near Bideford, N. Devon; and one was seen two years previously at Instow, by Mr. C. F. Hinchliff (Zool. 1883, p. 333).

A specimen in the possession of Mr. L. Sparrow, of Strode, near Ivybridge, is believed by that gentleman to have been obtained by his father (Pidsley, B. of Devonshire, p. 52).

Jay. *Garrulus glandarius* (Linn.).

[Jay Pic: *Dev.*]

Resident. Breeds.

Confined to wooded parts of the county, only to be reported as still common in those few woodland districts which are as yet safe from the hands of keepers, who wage war against this handsome bird because of its weakness for eggs. Like others of the Corvidæ, the Jay feeds indiscriminately on insects, grain, fruit, young birds, eggs, mice, &c. The follow-

ing excellent account of the bird is from the pen of Col. Montagu:—“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; it will sometimes 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, or even neighing of a horse.” We have never heard Jays “hooting,” but have often been deceived by their clever imitation of the soft mating notes of the Brown Owl, and a young Jay we took from a nest in our shrubbery and reared in the same room in which we kept rather an accomplished Parrot very soon learned all the Parrot’s words and phrases, and repeated them in the same ludicrous voice, the consequence being that the Parrot, jealous and indignant, for a long time maintained a sullen silence. The late Mr. T. R. A. Briggs examined four young Jays on June 11th, 1852, that had been shot, and he found that the old birds had been feeding them on the small round galls that are so common on oak-leaves. On June 17th, 1857, he found a nest with nearly full-grown young ones built in the fork of an apple-tree, with ivy growing around it, in an orchard at Derriford. The old birds were exceedingly bold, and when he was up in the tree appeared half inclined to fly at him. Their agitation and clamour were excessive; they flew round, chattering and menacing him, now cawing like a Rook, then mewing like a cat, and in their extreme agitation actually plucking off leaves and biting off pieces of dead twigs from neighbouring trees. Their solicitude pleased and amused him much (MS. Notes). We were always glad to see Jays about our grounds because of the entertainment they afforded us, and bore with them in spite of considerable depredations in the garden, until one summer, wishing to destroy the rats which were fast carrying off all our peas, we spread about the garden pieces of bread and butter anointed with phosphorus paste, and we were sorry to find that these had been eagerly devoured by the Jays, whose dead bodies we found lying about our grounds. It was several years before we again had any Jays, for it seemed as if intelligence of this fatal occurrence had been spread abroad by the survivors, and our garden was for a long time avoided by the Jays of the district. From its fondness for the acorn, on which it largely feeds in the autumn, the Jay has received the specific name of *glandarius*. Its bright blue wing-coverts are in great request for artificial flies for salmon-fishing, and its wings for ladies’ hats.

Magpie. *Pica rustica* (Scopoli).

[Pic, Mock-a-pic, Piannet (*N. D.*): *Dev.*]

Resident, generally distributed and common. Breeds.

“What a beautiful foreign bird!” is often the exclamation when we

are exhibiting our collection to visitors and a specimen of the Magpie, mounted in all his pride with expanded tail, is reached. And when the information is given that the Magpie is one of the most common of our indigenous birds the usual response is "We did not know there were such beautiful birds in this country!" Indeed, Master Mag, with his lustrous metallic green and white plumage, is a splendid fellow, especially when the sun is shining upon him, and it is a pity that his very mischievous propensities should render it needful to keep his numbers within bounds. He has a special weakness for birds' eggs and, as is well known, the surest bait for him is a hen's egg laid carefully on the gin. He is, however, a shy and cautious bird, and does not often get himself into trouble. At the nesting-time he loses some of his caution, and will approach near to houses if any of the garden trees afford a desirable situation in which to build, and he is very partial to a Scotch fir, placing his large untidy nest of sticks, dome-shaped, and with a hole for ingress, in a fork of its branches. At the time when we were ranked in the fraternity of birds' nesting urchins, we had a belief that "Bush Magpies" and "Tree Magpies" were distinct species, a widely prevalent belief among rustic egg-collectors. Young Magpies taken from the nest are not often reared, being very liable to severe cramps, in the paroxysms of which we have seen their miserable little legs snap and break like pieces of glass. In no place have we seen Magpies so numerous as they are on the rich pastures of Mid-Somerset, where they go by the name of the "Pheasants of the level," at evening flocking to some favourite larch-plantation to roost. Here they may be easily thinned by anyone who chooses to lie in wait for them. Great is the chattering when each little party comes in, and has its day's doings of successful thieving and mischief to relate. Sometimes we have seen Magpies assembled in the fields in flocks of a score or more, and the noise of the caucus has been astounding. Instances have been known of two large parties meeting, when a fight has taken place. In the autumn of 1862 we saw fifteen Magpies together on the ground in a field near Exminster surrounded by immense flocks of Rooks and Starlings. The Magpie is a favourite bird to keep as a pet, but is extremely mischievous, and not to be trusted in the neighbourhood of the poultry yard. Like the Jay, the Magpie delights to head the teasing parties of small birds which make fun of any unfortunate Brown Owl discovered asleep on some not very cleverly selected perch, when a characteristic woodland scene follows, until the Owl can endure the noise no longer and plunges into a deeper and safer roost. Sometimes the game changes, and Master Mag is made to afford amusement in turn. He is a very entertaining quarry to the falconer, and is dexterous on wing beyond belief. Those who only know him by his skulking flight as he dips along the hedge-rows would be surprised by the efforts he makes to shake off the Falcon. His craft leads him to take shelter in any bush where he may lie perdu, not stirring until the whips of those following the sport are cracked over his head, when he will venture forth again to dodge the swoops of the expectant Peregrine. When his last efforts have proved in vain, and the dreaded fatal stroke of the Falcon's powerful talon has been given, his bright tail is cut off, as

the brush of the fox is, and is presented as a trophy to some one of consideration who is "in at the death."

In the severe winter of 1880-81, Magpies kept sleek and fat, finding plenty of starving small birds to devour.

Observation.—The Californian Magpie, *Pica nuttalli*, only differs from our English bird in having a yellow beak. Two specimens, at least, of this variety have been detected in Britain—one in Stirlingshire, by Mr. Harvie-Brown, of Dunipace House; the other in this county near Buckfastleigh, by Mr. Gervase F. Mathew, R.N. These two excellent observers are neither of them likely to have been mistaken. Mr. G. F. Mathew obtained a close view of the bird, and sent the following account to the 'Zoologist' at the time (Zool. 1867, p. 1016):—"One day last July, while walking with a friend in the neighbourhood of Buckfastleigh, we saw in a hedge-row before us a Magpie busily employed searching for food. On approaching the bird it did not exhibit those symptoms of alarm which are generally common to the species, but, on the contrary, continued grubbing about in a very unconcerned manner. This appearing unusual, I paid more attention to it than I should otherwise have done. We still continued to advance, and it was not until we were about twenty yards from the bird that it imagined it time to be off. It then walked deliberately into the middle of the road before taking wing. While here it was in the full glare of the sun, and I then observed to my astonishment that it possessed a bill of *bright lemon colour* at the base, but of a darker hue towards the top. I uttered an exclamation of surprise, and called my companion's attention to it, and he agreed with me that he had never seen or heard of a Magpie's beak so coloured." The tameness of this bird proves it to have been a stranger. However, Dr. Coues and other eminent American ornithologists look upon the American Magpie with the yellow beak as not specifically distinct. "I continue to regard the yellow-billed race," writes Dr. Coues, "as simply illustrating the perpetuation of a fortuitous condition." The Yellow-billed Magpie is the Common Magpie of California, and when there we did not notice any difference in its habits from those of the English Magpie. But it disappears as the country becomes settled, keeping to the oak-covered districts.

There are some well-known lines about the Magpie:—

"One for sorrow,
Two for mirth,
Three for a wedding,
Four for a birth,"

and we have known superstitious people spit on the appearance of a single Magpie to avert the evil omen!

A white variety was in the possession of Mr. Comyns (E. M., Trans. Plym. Inst. 1830).

Jackdaw. *Corvus monedula*, Linn.[Daw, Chauk: *Dev.*]

Resident, generally distributed and very numerous. Breeds in the towers of Exeter Cathedral; old church-towers; ruins, such as Berry Pomeroy Castle; under railway viaducts; in thick ivy against walls of country houses; with Rooks in trees; in rabbit-burrows, as at Vitifer Tinmine on Dartmoor; in clefts of the Dewerstone rock; and in the cliffs of the sea-coast in all suitable localities. This bird is decidedly on the increase in the Kingsbridge district (E. A. S. E.). White specimens have occurred at Exeter, Torquay, and Plymouth. Mr. R. P. Nicholls had a spotted variety brought to him about ten years ago.

We must confess that the impudent and rather mischievous Jackdaw is one of our favourites. We like to see him at large either soaring about the windy pinnacles of some cathedral tower, popping in and out of the crevices of some old ruin, or with his chatter adding another note to the music of the sea-shore as he flits along the cliffs. From our beautiful church-tower at Bishop's Lydeard we were compelled to shut Master Jack out by netting the windows with wire, as it was his troublesome habit to bring in cartloads of sticks, depositing them in the bell-chamber and on the stairs, to the risk of anyone visiting the tower getting a nasty fall. There is no bird which is more easily tamed than a Jackdaw, nor makes a more entertaining pet, and none that becomes more affectionate to its master. Some young Jackdaws we once kept about our grounds, which were permitted perfect liberty, became very clever. One thing they discovered was the opportunity for mischief afforded by the few quiet moments of our morning family prayer. For this they would be waiting somewhere on the lawn, and the moment after they had seen the servants enter the room they would fly in at one of the windows, alight on the breakfast-table, and be at the butter in a trice, and would then make their escape with some spoil or other in their beaks. Some wild Jackdaws which were daily passing at last decoyed our tame birds away, but some weeks after this happened we were returning from church one Sunday morning when a flock of Jackdaws flew over, and on calling to them one was seen to display uneasiness, and separating from his companions gradually descended until he settled on our brother's shoulder, manifesting the greatest delight at the presence of his master. Jackdaws are insatiable for water, and in warm weather like to bathe several times a day, and several of our pets came to an untimely end by getting into water-butts &c. while seeking to indulge this craving. We have had them fly to us with delight to place themselves under the rose of a watering-pot for a good sprinkling. Insects, carrion, grain, birds' eggs, fruit, especially cherries, and other things, go to form the very varied diet of the Jackdaw. When we had our tame birds we were keen entomologists, and often had the mortification to see "good specimens" of lepidoptera devoured by our pets, who were more clever in capturing the insects than we were with our nets. For some time a friend of ours in Barnstaple had a tame white

Jackdaw which used to fly in and out of the windows and pervade the street. The cliff-haunting Jackdaws assemble in large flocks in the autumn, and come inland, visiting the stubbles.

Carrion-Crow. *Corvus corone*, Linn.

[Blackbill.]

Resident, generally distributed and common in the southern part of the county. Breeds. According to Polwhele it was not common when he wrote in 1797 (*Hist. Devon.* i. chap. 6).

This most mischievous bird, well styled a raven in miniature, is common enough throughout the south-western district except in those few localities where the guns and traps of keepers have effected some diminution in its numbers. It is a solitary bird, and it is rare to see more than a pair together, except at the time when the young birds are first out of the nest, when they keep in company with the old birds for a few weeks. The Common Crow can also be credited with a full share of the wariness and cunning of its tribe, and it is in general a difficult bird to approach. Shooting on Dartmoor, we have once or twice been astonished at the unsuspecting conduct of the Crows frequenting its wilds, which have flown deliberately up to our gun to their own exceeding discomfiture.

Young birds, birds' eggs, carrion, insects, and grain form the food of the Crow. It is very destructive to young poultry, and Col. Montagu saw a Crow strike a Pigeon dead from the top of a barn. It will also attack sickly lambs, and kill young hares and rabbits. The Crow, when it has satisfied its hunger, will conceal the remainder of its food for a future meal. Col. Montagu saw 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 Colonel also once witnessed a combat between a Crow and a weazel, in which the latter succeeded in killing its opponent and carried off its body.

The Carrion-Crow is not a very common bird in N. Devon. It was far otherwise when we resided in North Pembrokeshire, where we had very ample opportunities of studying this bird, as the Crows came from all the country round to nest in the small plantations adjoining our house. One spring we took twenty-two nests in our grounds, and at all times waged war against these egg-stealers. Beneath one nest which was placed in an ivy-covered ash tree we picked up ten recently-sucked Pheasant's eggs and five Moorhen's eggs; all were quite fresh, still containing the whites, proving that it is only the yelk which the Crow cares for and carries in its beak to the young birds in the nest. Crows are devoted parents, as we observed in several touching cases, when the old birds, at other times so wary, were willing to expose and sacrifice themselves rather than leave their broods. The noises these birds make in the spring, and again in the autumn, we

considered quite diabolical and used greatly to irritate us. Perched on the top of some Scotch fir, with inflated throat, and jerking its body forwards with each repetition of the monotonous, discordant cry, the Crows would sometimes, one against the other, keep up their uncanny music for hours at a time.

Carrion-Crows appear to feel the first frosty nights. A severe frost set in early in November 1887, and after it we found numbers of dead Carrion-Crows; and passing an oak tree one very cold morning, saw a Crow fall out. We picked the bird up, when it gave one faint croak and expired. We have also found them lying dead on the ground after a long protracted drought. These omnivorous birds are very fond of fish, and one morning we encountered a Crow in N. Devon flying heavily over a water-meadow with a good-sized trout in its bill, which it dropped as we approached in order to make off more rapidly. In the summer, when the streams are low, we have noticed Crows searching for freshwater mussels (*Unio* and *Anodonta*).

In winter Crows seek the sea-shore to feed on shell-fish, and many may be seen at low tide thus engaged at Teignmouth on the sands.

A pair will frequent the same plantation year after year to breed. A pair have bred for more than forty years in a small wood near Topsham. Crows have sometimes been made use of to hatch bantam's eggs, their own being removed from the nest, and the precaution taken to closely pencil over the shells of the substituted ones. On Skomer Island we were informed by Mr. Vaughan Davies that some hen's eggs placed in a Crow's nest and hatched by the Crow resulted in *black chickens*. As there were no black fowls in the poultry-yard on the island, this was, of course, looked upon as due to the foster-parents' influence upon the eggs!

Carrion-Crows are still numerous near Kingsbridge (E. A. S. E., *in litt.*), and near Newton Abbott (R. Greene, *v. v.*).

A white variety was in Mr. Comyns' collection (E. M., Trans. Plym. Inst. 1830); and a cream-coloured one occurred near Kingsbridge in 1888 (R. P. N.).

Hooded Crow. *Corvus cornix*, Linn.

[Mussel-Crow (N. D.).]

A casual visitor of occasional occurrence during the autumn and winter months, but rare in the spring. It appears to have been formerly much more numerous, frequenting the sea-shore near Plymouth in winter (Polwhele, Hist. Devon, i. chap. 6), and Dr. E. Moore says it was common about our coasts in winter from October to April (Trans. Plym. Inst. 1830). In his "List of Birds of Dartmoor" in Rowe's 'Perambulation' (1st ed. p. 230) he observes that it was "said by Pennant ('Zoology,' vol. 2) to breed on the Moor, but resorts to the coasts in winter: becoming scarce, however." But Polwhele says it was never seen on Dartmoor in summer. Turton and Kingston (1830) say it was scarce, but had been shot in the neighbourhood of Plymouth.

We can remember when the Hooded Crow was a common autumn visitor to N. Devon, where we have seen numbers of them at the mouth of the Taw at low water on the mussel-beds. In company with Herring and Lesser and Great Black-backed Gulls they would be seen flying continually a short distance up into the air, and then dropping a mussel on the rocks below in order to break the shell. From some cause or other the Hooded Crows gradually became scarce and are now very rarely seen. It could not be persecution, for so wary is this bird that an instance of one being shot hardly ever came to our knowledge. Perhaps the over-dredging of the mussel-beds has led to their being forsaken by the Crows. We were informed that a pair of Hooded Crows nested one spring in Youlston Old Park, N. Devon. Mr. G. F. Mathew had reason to believe that one had mated with a Carrion-Crow ('Naturalist,' 1866, p. 359).

Professor Newton considers the Black and Hooded Crows only forms of the same species (*cf.* Yarrell's B. Birds, 4th ed. ii. p. 274). Mr. Dresser, however, says young birds, the produce of mixed marriages, are, like all hybrids, intermediate in appearance, whence he judges that the two species are fairly distinct.

One occurred near Topsham, April 6th, 1841 (F. W. L. Ross, MS. iii. p. 70). One was killed in a field at St. Thomas, near Exeter, December 12th, 1849 ('Exeter Gazette'). Two near Plymouth, March 12th, 1853 (B., MS. Notes). We saw one near Topsham, October 21st, 1854; it was being mobbed by Rooks. A specimen was obtained in the marshes near Newton Abbot in the autumn of 1854 (E. P., Trans. Devon. Assoc. viii. p. 271). One was seen at Duryard, near Exeter, January 7th, 1866 (R. C.). Two were shot on Woodbury Common in December 1870, and are now in the possession of Mr. W. Snow. One which occurred on the Dart is in the Torquay Museum. One was killed at Plymouth, March 31st, 1873. It is uncommon there (J. G.). Several were seen by Mr. G. B. Corbin in March 1877 at Watcombe Park, near Torquay (Zool. 1877, p. 444). One was seen near Exmouth, November 15, 1881. A specimen was shot near Halwell, on the mud of the Kingsbridge Estuary, January 27th, 1886, by Sir Harold Hewett (E. A. S. E., MS. Notes). About six have occurred in the Kingsbridge district in twenty-five years (R. P. N., MS. Notes).

The Hooded Crow used to visit Lundy Island in autumn and winter (Trans. Devon. Assoc. viii. p. 308).

Rook. *Corvus frugilegus*, Linn.

[Anglo-Saxon *Hroc*, *i. e.* Croaker.]

Resident, generally distributed in wooded districts, very abundant, and in some places increasing enormously in number. There are many large Rookeries in the neighbourhood of Exeter, and some pairs breed in the elms in the Cathedral Close in that city. There was a famous Rookery in Pixton Park, near Dulverton, but the trees were cut down in 1891. In Sharpham Woods, on the Dart, immense numbers of Rooks breed, and the Rookery there is supposed to be the largest in the kingdom.

Although Mr. Carlyle was of opinion that "to hold a dialogue with a rookery" was the best expression for the most utter confusion and bewilderment, we must confess that we have often listened with pleasure to the confabulations of the Rooks high above us in their breezy homes, and

have thought that we could detect a meaning in the variously inflected caws with which the young in the nests are chided or encouraged, the partners returning with food are saluted, a lazy thief who would pilfer sticks from other nests rather than seek them for himself is objurgated, and the general affairs of rookdom are discussed. There are many, we know, who look upon the Rook as an unmitigated nuisance, as a thief and robber at the very best, and who would not grieve if he were altogether exterminated; but we should regard it as a sad day if he was to be removed from the landscape in which he is so interesting an object, and there are numerous arguments at hand in favour of his preservation. Chief of these is the vast service he renders agriculturists in clearing their fields of "wireworms" (larvæ of *Elateridæ* or click-beetles), "leather-jackets" (larvæ of *Tipulæ* or daddy long-legs), and the even more destructive grubs of the cockchafer, which feed on the roots of grass; and the overwhelming fact that where the Rook has been destroyed he has been reimported, as it was discovered that the crops could not grow without him. If he does occasionally pilfer the potato-grounds and the newly sown wheat, yet he may be easily warned off, and any little injury he does is a thousand-fold counterbalanced by the benefits to which we have referred above.

The Rook is more or less omnivorous; and in their season walnuts and nuts of various kinds, apples, pears, fruits, and berries, as well as carrion, meet with his attention; and he is not free from suspicion of occasionally adding eggs and young birds to his *menu*, and even young rabbits. He also feeds on mice and young rats, and sand-eels on the sea-shore, and shell-fish. Young Rooks are extremely fond of cockchafers, and may be seen picking these beetles off from the trees soon after they have flown from their nests in May. In October flocks of Rooks visit walnut-trees, plucking the nuts off the branches, and the acorns off evergreen oaks. Whilst the young are in the nest the old birds principally feed them on newly sown grain, as may be seen by the castings under their nesting-trees consisting entirely of the husks of the grain; in autumn after harvest they pick up much grain from the stubble-fields, and in winter may often be seen pulling the ears out of wheat-stacks. They often seek for food on the ooze of the estuaries and sea-shore with the Gulls, and boatmen by the seaside consider this a sign of bad weather coming. Mr. Henry Nicholls saw a Rook on Thurlstone sands during very cold weather seize a Thrush and tear it, and then fly off with it in its claws; and during the cold spell of December 1890 and January 1891 we ourselves saw a Rook pegging away at a dead Thrush, which was frozen quite hard, returning to it for several days, until all the flesh &c. had been devoured. We have seen a Rook hovering over the Exe at Exeter and picking up floating substances from the water. This habit has been observed by Mr. Gatcombe also (Zool. 1873, p. 3393).

The Rook is at all times an interesting bird to watch; one of the common objects of country-life; and may he long continue such! See him on a wet day when the whole landscape is blotted out by the clouds and the rain is pouring down hopelessly; he then sits, with his tail drooping down, on the hedge-row elms the picture of patient misery. But how

different his attitude on the same trees some bright breezy autumn day! he then poises himself joyously on his perch, his tail horizontal or slightly perked upwards, as he talks to his companions and scrutinizes the neighbourhood for the best prospect of a successful day's campaign against his juicy insect food. And then how characteristic a sight of a warm summer's evening, just at the still sunset hour, the flocks of Rooks seen returning from their feeding-stations to their roosts, some ancient bird leading the clanging rookery home—their numbers seemingly interminable; they have all apparently passed overhead, yet still are there specks which grow out of the distance and reveal themselves as birds. The cry is still they come, and if there be a large rookery in the neighbourhood the long-drawn-out stream will be perhaps a quarter of an hour or more streaking the sky, until at last the army becomes reduced to one or two laggards which bring up the rear.

The direction of these homeward flights will be often observed to alter at different seasons of the year, as the Rooks are a little capricious in the choice of their quarters for the night, and will shift from one wood to another according to its position on sheltered or exposed slopes of the hills. However, when we lived in Pembrokeshire, the inmates of a large rookery, two miles distant, used to pass over our house every morning about half an hour after sunrise, on their way to some high moors above, where they scattered about to feed, and always returned just before sunset, streaming over our house again. For eight years we noticed that they never failed to pass each morning and evening, whatever the weather, over our house, and never deviated fifty yards from their usual aerial path.

It is well known that in the autumn the Rooks revisit their rookeries and examine the condition of their nests. They do not, however, remain there, but after assembling at the trees fly off to their roosting-station in the sheltered woods they have selected for the winter. Very rarely Rooks have been known to hatch off a second brood in the autumn. Early in October 1865 five pairs of Rooks were building, and in one nest there were several young, at Mr. Willcock's farm, 'Pengelly's,' near Exeter. A similar instance was communicated by Mr. E. H. Rodd to Mr. Yarrell, Rooks having hatched their young in a sheltered valley in Cornwall in November 1836.

In Devonshire Rooks begin to build usually about the middle of February, but in 1874, 1877, and 1882 at the beginning of that month, and in 1890 in January, at Topsham. They line their nests with earth, and on April 8th, 1865, we picked up a clod of earth dropped by a Rook which was attempting to carry it to her nest in her beak, and we found it to weigh $2\frac{3}{4}$ oz.

Young Rooks are very often more or less marked with white, especially on the chin and throat, and the claws, toes, and legs are frequently white or mottled. We have shot many in our own rookery near Topsham marked in this manner. One with white quill-feathers and mottled feet was shot at Crediton, July 13th, 1882 (*Zool.* 1883, p. 28). Mr. Comyns had one entirely white except the scapulars (*E. M.*, *Trans. Plym. Inst.* 1830). There is a curious lead-coloured variety in the A. M. M. Mr.

R. P. Nicholls has had mottled varieties sent to him; and Mr. Gatecombe records a remarkably mottled specimen shot near Plymouth in May 1880, with the bill and toes of a beautiful chrome-yellow (*Zool.* 1881, p. 50).

We have always considered rook-shooting, even with pea-rifles, as very poor sport, hardly to be ranked above pigeon battues; but there is one kind of sport afforded by the Rook which deserves to be spoken of in higher terms. This is rook-hawking with trained Peregrines, especially in those parts of the kingdom where the Rooks are in the habit of seeking their food on high ground, and the falconer has an opportunity of intercepting them on their return to their nests. When the Rook first becomes conscious of danger and detects his enemy his alarm is often ludicrous, and he will fly down a farm-house or cottage chimney, should one be at hand; but if there be no shelter available he will nerve himself to the effort, and will at once begin mounting the air, and will afford a very good flight.

Young Rooks are extremely delicate eating and make delicious pies; Devonshire country people will go any distance to fetch a bunch of them when a great shoot comes off at some large rookery.

Raven. *Corvus corax*, Linn.

Resident, and up to forty years ago numerous, but now only occasionally seen, except in certain places where a few pairs still breed on the cliffs of the sea-coast, on the rocky tors of Dartmoor, and on trees in some woods in North Devon.

This powerful depredator is still not uncommon around the south-west coast, where he occupies a nesting-station (to which the same pair return year after year) on some of the high cliffs, and there lives a life of almost constant warfare and bickering with the Peregrines and his other near neighbours. Ravens also inhabit and nest in some of the Dartmoor tors, from whence young birds are annually brought into Plymouth for sale. Although preferring rocks and cliffs for their eyries they occasionally place their nest in a wood, generally choosing some tall Scotch fir, where they construct an untidy edifice, sometimes contenting themselves with enlarging a deserted Crow's or Sparrow-Hawk's nest, and are among the earliest birds to lay, often having eggs before the end of February. The eggs are very small in proportion to the size of the bird.

Justly dreaded for the mischief they do, the destruction of any of these wary tyrants is hailed with satisfaction by the farmers in the vicinity they frequent, who have had many missing chickens to lay to their account: and we recollect when one very ancient and powerful Raven was shot on Brean Down, in Somerset, it was carried round the district to be exhibited, its slayer receiving sundry small gratuities to reward him for the benefit he had conferred upon the henwives. Ravens may be judged to be scarce in a locality, and yet any carrion will not fail to attract them from a great distance, as we have observed ten or eleven congregated in an orchard around a dead horse some miles inland. The presence of these

birds is made known by their hoarse croak, which sounds like a very guttural "pork," which they rarely fail to emit as they are on wing on one of their aerial journeys. We noticed on Lundy a daily encounter between a pair of Ravens and a pair of Peregrines, and one morning a very fine Raven was picked up lying dead on the "sidlings," with no visible mark of injury upon him. The verdict we pronounced at the time was that he had probably been choked when engaged in resisting the attack of the Falcons. A tame Raven we had once was a very amusing and also a rather formidable pet. He was permitted to be at large, and delighted to frighten and annoy every creature he found he could alarm. He would lie perdu, and cunningly pounce out upon the female servants from behind and peck their ankles. He would sit on the top of a spaniel's kennel, and whenever the dog looked out would stoop down with a well-aimed dig at his head. And when the dog was fed the Raven would extract the choicest bones and tidbits from his bucket, and then bury them one after the other in the ground an inch or so beyond the reach of the unfortunate spaniel's chain, croaking all the time to himself in supreme enjoyment of his cleverness in teasing. Nor would he leave the gardener unmolested. Directly he had gone away for dinner the Raven would hasten to unearth any seeds he might have been sowing, and when the asparagus first broke above ground in the spring he would delight in cutting off the shoots and flying away with them. After any extra piece of mischief he would retire to the stable-roof, and there sit croaking to himself until he thought it safe to venture down again. One spring he was shut up in the stable, because he was found to have a liking for hens' eggs and young chickens, and visited the poultry department oftener than his presence was desired; he then gave the greatest proof of his ingenuity in mischief. He succeeded in cutting with his powerful beak a small hole at the bottom of the stable-door large enough for a chicken to pass through, and just inside it he would lay a bait consisting of small shreds of his own food, and would then stand quietly expectant behind the door until a hen and her brood approached, when some foolish chick, in spite of the anxious maternal cluckings, would be sure to run through the treacherously prepared hole and fall into the Raven's beak. But he met at last with the just reward of his misdeeds. Chasing a chicken one day it ran into a wood-rick, and the Raven following became entangled in the wood, and in his efforts to extricate himself was strangled.

Another, a young bird from Dartmoor, that was under our care not long ago, whenever he observed us take a spade to do some gardening would join us, intently watching our operations and greedily devouring any large earthworms we happened to turn up. When not engaged in such serious work as pulling up the marks for seeds and nipping off the heads of carnations, or any other bright flower which attracted his attention, he would look about for amusement. Coming quietly up behind our unsuspecting tabby he would inflict a sharp pinch on her tail, and when she fled from his too *pressing* attentions would pursue her with such gigantic hops that she had to put on her best speed to escape from him, thoroughly

frightened. Bold and fearless as he was ordinarily, yet if a blue-bottle or other large fly came near him he showed the most abject terror.

It is not difficult to attract a Raven within range by lying down perfectly still upon the ground as if you were dead. We have done this successfully upon the coast. At first the Raven will alight at a cautious distance; but if you remain quite motionless he will after a time begin to approach with long sidling hops, and may chance to come sufficiently near to ruc his temerity if you have a concealed gun.

Instances came under Col. Montagu's observation of Ravens nesting in a tree at no great distance from a rookery, in order to have an easy living upon the eggs and young Rooks, and he knew of a rookery having been broken up and the Rooks compelled to go elsewhere from the persecution they thus sustained from their powerful neighbours.

A friend of Mr. Gatcombe's scraped acquaintance with a Raven inhabiting the wild cliff at Tintagel, which became so familiar with his presence that it really seemed pleased with his company, and would actually fly to meet him every morning when he approached the place, and alight within a few yards of his feet, eying him knowingly all the while, without exhibiting the slightest symptom of fear. On one occasion when coming round a sudden turn on the cliff, a long way from the usual place, happening to see his friend fly by in quite another direction, he stopped and exclaimed, "Hulloa there, where are you going in such a hurry?" At this the bird actually turned round and alighted on a wall close by his side, afterwards following him all the way to the spot on the top of the cliff just under which the nest was placed.

"A dealer in live birds at Plymouth has had nearly twenty young Ravens sent to him this season from the coast of Cornwall; the men who got them said that they did so at the risk of their lives, and had to walk twenty miles and carry 40 lb. of rope to the breeding-places." (J. G., May 1872.)

"I found Ravens plentiful among the magnificent cliffs at Ilfracombe, and on one occasion saw a flock of seven or eight flying by the celebrated Tors Walks, where a pair or two may be daily seen. It is very curious to watch the singular evolutions performed by a pair of Ravens when disturbed in their haunts, even at this time of the year, but more especially during the nesting-season. At such times they will rise croaking above the intruder's head, pass and repass, rising, falling, and tumbling almost over in the air as if hit, and disappearing behind a projecting crag, will reappear from quite a different quarter over the brow of the cliff, and continue their manœuvres until the invader has left the spot." (J. G., October 15th, 1875; Zool. p. 4717.)

Great numbers of Ravens frequented a field at Compton, near Plymouth, to feed upon offal and the sweepings of slaughter-houses deposited there in April 1855 (T. R. A. B.).

We have seen Ravens near Topsham and Teignmouth, but not since 1865. A pair used to breed at Killerton, and one was seen at Stoke Wood, near Exeter, about 1873, by Rev. J. Hellins. One was shot at Downes, near Crediton, October 12, 1883 (Pidsley, 'B. of Devonshire,' p. 54). Ravens breed at Wembury on the cliffs of the

sea-coast near the mouth of the Yealm, and ten were seen in a flock there July 23rd, 1874; also at Bovisand, near Plymouth, where a pair have nested in the same spot for forty years, up to April 1883 (J. G.); and at Mount Edgecumbe and the Rame Head.

Formerly Ravens used to breed at Tavy Cleave and on the Dewerstone (E. M.). A pair breed on the Muswell Rocks on the Tamar. Mr. Gatcombe speaks of young Ravens being obtained on Dartmoor in April 1880 (Zool. 1880, p. 251); and Mr. A. Radford informed us in 1883 that a pair were breeding on a tor near Lydford. Mr. Romney Greene obtained a young bird from rocks near Hey Tor in April 1890. A pair breed in an old quarry near Okehampton (A. Mitchell).

Some pairs breed at or near the Start Lighthouse and also near the Bolt Tail (R. P. N., MS. Notes), and Mr. E. A. S. Elliot says he scarcely ever misses seeing a pair or more at any period of the year in walking around the cliffs of the Kingsbridge district.

A pair have built in the cliffs at Watcombe, near Torquay, from time immemorial (Von H., Zool. 1869, p. 1846).

In the eastern part of Devon Ravens breed at Rousdon, near Axmouth (Zool. 1883, p. 35); and at Peak Hill, near Sidmouth.

In the north of the county Mr. Gatcombe found them plentiful near Ilfracombe in October 1875 (Zool. 1875, p. 4717), and a pair breed at Langleigh, near that place. When fishing on the Torridge in April 1889, we encountered a pair of Ravens in a wood some couple of miles above Torrington, and found them at the same spot as we returned late in the afternoon. Their angry gestures and notes, as we passed their tree, made us feel pretty certain that they had young close at hand. Mr. O. V. Aplin mentions that he had heard that Ravens were still found in some numbers on Exmoor in August 1886 (Zool. 1887, p. 71). We learn from Mr. H. A. Evans that Ravens still nest on the cliffs at Portledge.

Capt. Wade, of the ship 'Great Britain,' informed us that in November 1851, when homeward bound from Canada, in latitude 49° N., longitude 20° W., about 500 miles west of Ireland, he captured a Raven which came on board his vessel. It was placed in a hen-coop and soon became very tame.

Family ALAUDIDÆ.

THE LARKS.

Of the true Larks there are only two, both of them general favourites on account of their delightful melody, which are ordinarily met with in Devonshire, the Sky-Lark and the Wood-Lark, and both of these are fairly numerous throughout the county, the Wood-Lark being one of our most characteristic birds. Of all our small English birds the Sky-Lark is commonly taken as the representative *par excellence* of English country life, so much so, that we are familiar with the pathetic tales of the value set upon this homely songster when it has been carried far away into the Australian bush, where its well-known notes have conjured up loving recollections of the distant English home.

Sky-Lark. *Alda arvensis*, Linn.

Resident in part, generally distributed and abundant. Breeds.

The Sky-Larks that remain with us to breed are few in comparison with the hosts that come to us in autumn and winter from the north and east. Large flocks arrive in the autumn and remain with us during the winter, feeding on the stubble-fields; but, if the weather be exceptionally severe, they congregate on the south coast and move on further west, or, becoming congested in the district, fly out to sea in quest of a warmer climate. In heavy snow, however, they become so weak from want of food that thousands perish, especially if the cold spell comes in February. In winter, as we have noticed, Sky-Larks, almost to a bird, disappear from the cold highlands of Mid Devon, resorting to the coast.

In the winter of 1860 we were Woodcock-shooting on Lundy Island, when there was a heavy fall of snow, with a long continuance of hard black frost. After three or four days of this weather Sky-Larks began to arrive on the island, and every day the frost lasted there were fresh accessions. While we were trying the top of the island we could see flock after flock drop in, until the Larks became so thick upon the ground that often several would be shot unavoidably when a Woodcock or Snipe rose before the guns. Numbers perished from cold and hunger, and had their bones picked by the hungry rats, which swarm upon the island. In deep snow Sky-Larks crowd into kitchen-gardens to feed upon the various greens. We have then watched them standing round a plant picking off the green flesh from the leaves on all sides, until nothing is left but the bare ribs, and the snow is trampled hard with their feet. But in the severe winter of 1890-91 many died in our garden, becoming too weak and frost-bitten even to feed upon the tops of the greens which stood out above the snow. Although the poetical idea of the Sky-Lark associates his song with the blue vault of heaven, from which it floats down to earth, yet when the male bird is in vigorous song at the nesting-time he sings with equal indifference whether he is mounting the air, or standing on a clod upon the ground or on the top of a stone wall, and we have even heard him singing from the top of a hedge. We had a new revelation respecting the character of the Sky-Lark when we were recently in a bird-catcher's shop, and in a long cage containing a dozen or more lately captured Larks witnessed a most desperate combat between two young cocks, while others stood round ruffled and bleeding from recent contests. We had no idea before that they were so pugnacious. But being huddled together in a small cage is enough to make any birds quarrelsome!

Fuller, in his 'History of English Worthies' (London, 1662, part 1, p. 273), mentions the great wonder of an incredible number of Larks, "for multitude like Quails in the wilderness," that visited the city of Exeter during its siege by the Parliamentary forces in the cold winter of 1645-46, and contributed to the resources of its defenders (*cf.* 'Yarrell's B. Birds,' 4th ed. i. p. 619). Montagu records their extraordinary abundance in the winter of 1803 in South Devon (Orn. Diet., Suppl.), and, as before stated, vast flocks visited Lundy Island at Christmas 1860 (M. A. M., Zool. p. 7381). On the 24th February, 1873, when the weather was extremely severe and the ground covered with

snow, we saw thousands of Larks flying out to sea from the coast between Dawlish and Teignmouth; and when heavy snow had fallen on 21st December, 1890, multitudes were seen arriving from the east all over the south of Devon, flying in a continuous stream for several hours, with Redwings, Fieldfares, Starlings, and Lapwings, towards the south-west.

Some of the Larks that come to us in winter are of very much smaller size than our resident birds, and probably come to us from Germany. A white specimen was in the possession of Mr. Prideaux, of Plymouth (E. M., Trans. Plym. Inst. 1830). A similar specimen was shot at Topsham, October 19th, 1847, and is now in the A. M. M., where there is also a buff variety, shot at Hooperu, Exeter, February 3rd, 1866, and Mr. Henry Nicholls also has a buff specimen. There is a melanic variety in Mr. Byne's collection from Devon, and we have recently seen a "Black Lark" in a cage at Littleham, near Exmouth, which was reared from a nest found there. Another very dark-coloured individual obtained there has the quill-feathers of the wings and the tail-feathers all white.

Wood-Lark. *Alauda arborea*, Linn.

Resident; common in some woodland districts in the county. This bird is easily overlooked, even where it is numerous, by those who are unacquainted with its note. It is more often heard than seen, and is an excellent ventriloquist. Specimens are difficult to procure, except in winter, when Wood-Larks are to be found in small flocks. When migrating it is found on high rough ground. Montagu considered the Wood-Lark more common in Devonshire than in any other part of England, and especially so in winter (Orn. Diet., Suppl.). Breeds.

This species is rather local at Plymouth, but a few may be seen near their favourite haunts throughout the year. During severe storms in winter, however, great numbers appear on the sea-coast in small parties, or pairs, from the east (J. G., Zool. 1867, p. 3050; 1872, p. 3258). Woodlarks were more plentiful than Sky-Larks under the northern slopes of Dartmoor in October 1873, little parties being seen in almost every field (M. A. M., Zool. 1874, p. 3825); and on 1st October in that year they were plentiful at Tiverton (J. G., Zool. 1873, p. 3785). The Wood-Lark is not unfrequently heard near Teignmouth (W. R. H. J., Trans. Devon. Assoc. vi. p. 70); breeds in the neighbourhood of Kingsbridge (R. P. N., MS. Notes); and occurs in a small wood near Topsham. A buff-coloured specimen was shot near Crediton in August 1851 (W. T., 'Naturalist,' 1852, p. 19). Interesting observations on the habits of this bird are to be found in Bellamy's 'Nat. Hist. S. Devon,' p. 384.

The high price to be obtained by bird-catchers for Wood-Larks—we have known cocks in good song fetch 15s., and even a guinea, each—has led to the extermination of this delightful songster in several places in the West of England. When we lived in North Devon it was a very common bird, and was never far away from our house at any time of the year. We have had it nest in our strawberry-bed, and on all fine days could hear its delightful song. We once heard it singing throughout a cold March night. Every now and then there would be a squall of hail, when the little songster would be hushed, but directly the moonlight shone out again the clear notes rang once more through the night. In the

winter we used to see little parties of Wood-Larks consisting of the old birds and the young of the year in most of the fields, and our impression was that unless the weather was very severe the Wood-Larks did not stray many fields away from the site of their nest. In the high ground around Hatherleigh we used to find Wood-Larks very numerous in the autumn, while Sky-Larks were comparatively scarce.

We one day discovered a nest of a Wood-Lark in an open ferny field, and did not take it. The next time we passed the spot we found that the birds had erected a dome of ferns very skilfully above the nest for extra concealment.

Crested Lark. *Alauda cristata*, Linn.

An accidental visitor of rare occurrence.

Lord Lilford has informed us that in the month of July 1852 he repeatedly saw a pair of Crested Larks close to the Sands Hotel at Slapton Ley. He then took them for Wood-Larks, but adds that directly he became acquainted with the Crested Lark in Spain he recognized the note and several habits of the bird whose acquaintance he had made in South Devon. The pair seen at Slapton frequented the road which runs along the shingle-beach between the Ley and the sea.

A specimen of the Crested Lark, shot on the Braunton Burrows about the year 1851, was in the collection of Mr. Cleveland, of Tapley Park, near Bideford. A granite pillar, standing in Tapley Park above the Torridge, commemorates this young officer, who fell in the cavalry charge at Balaklava.

Like the Wood-Lark, the Crested Lark is somewhat of a stay-at-home. It is abundant on the northern coast of France, but seldom takes the trouble to cross the Channel to our shores. In flight it resembles the Wood-Lark, but differs both from that bird and the Sky-Lark in its partiality for the haunts of man, being commonly found in village-streets, perched upon the houses and sheds, thus seeming to share the vulgar habits of the House-Sparrow. Its nest and eggs are said closely to resemble those of the Sky-Lark. The crest is characteristic of both sexes, being slightly smaller in the female bird.

Four specimens of the Crested Lark have occurred on the south-western coast of Cornwall, but it does not seem to have been met with either in Dorset or Somerset.

[Short-toed Lark. *Calandrella brachydactyla* (Leisler).

Some individuals of this species were reported to have been caught alive in Devonshire in November 1889 ('Field' for November 9th, 1889, p. 667; Zool. 1889, p. 58). The Rev. H. A. Macpherson has, however, ascertained that these birds had been imported from Italy and bought by a dealer at

Peckham (Zool. 1890, p. 394). The Short-toed Lark has occurred once on the Scilly Islands.

When we visited the Zoological Gardens this last summer we saw in the Western Aviary a Short-toed Lark, probably one of these very birds, labelled "Devonshire. Presented by Com^r. W. M. Latham, October 28, 1889." This small species of Lark is a summer migrant to the South of Europe, being abundant in some parts of Southern France and throughout Spain and Portugal, and is only a very rare and accidental straggler to higher latitudes. We are convinced that we saw one of these little Larks one day in early autumn on the Braunton Burrows. We followed it for some time, but did not succeed in shooting it.

The example obtained by Mr. Jenkinson on Scilly was also reported as "rather wild." It was observed among some bents growing on the sand a few yards from the beach, and attracted attention chiefly by uttering a note that was unusual, as well as by its general appearance.]

[Calandra Lark. *Melanocorypha calandra* (Linn.).

This fine species of Lark, well known in Spain and in Southern Europe, where it is as favourite a cage-bird as our own Sky-Lark is in England, has been twice obtained in South Devon, and although it may be objected that these birds were probably escapes, yet this applies to so many birds now admitted into the "British" list, that we need not scruple to record these Devonshire examples, although with the reservation mentioned beneath. Writing from Plymouth on 15th August, 1863, Mr. J. Gatecombe says:—"A short time since, when looking over the collection of Mr. Pincombe, taxidermist, of Devonport, I recognized a specimen of the Calandra Lark, which he assured me had been killed in the neighbourhood, but that he had hitherto considered it to have been a specimen of the Shore-Lark" (J. G., Zool. 1863, p. 8768). Commenting upon this, Mr. J. H. Gurney, Jr. (Zool. 1869, p. 1599), adds that Mr. Gatecombe had detected another of these Larks in the possession of Mr. Byne, which that gentleman had procured from Truscott, the Exeter bird-stuffer, who said it was a Lapland Bunting, and killed near Exeter. Subsequently, in the 'Zoologist' for 1876 (p. 4835), Mr. J. H. Gurney writes, "the Calandra Lark is said to have occurred once at Plymouth and once at Exeter. With regard to the latter specimen I have my doubts; nor is the former entirely without suspicion, though the specimen, which is in my collection, has not the appearance of having been a foreign skin. When I purchased it I obtained, through Mr. Gatecombe's intervention, the following certificate: 'I certify that this Calandra Lark was killed by St. John's Lake (Plymouth), and I had it in the flesh, and mounted it myself.—Abraham Pincombe.' This bird is said to have been killed by a man named Kendall, now dead. It agrees very well with specimens obtained by me in Spain and Algeria." But, after this, we must quote from Mr. Brooking Rowe:—"No reliance is to be placed on anything Pincombe says, and that the specimen was obtained here is to be received with caution. The

only thing to be said in favour of the authenticity of the specimen is its possessor's ignorance of the bird."

Both these instances being "dealer's birds," we have thought it best to include this species between brackets. (Cf. Newton, 'Yarrell's B. Birds,' 4th ed. i. p. 646.)]

Shore-Lark. *Otocorys alpestris* (Linn.).

A casual visitor of very rare occurrence.

Although a regular autumnal migrant in small numbers to the south-east of England, this pretty little visitor from the north-east very rarely extends its flight to the Western Counties, and there are very few records of its appearance in Devonshire. We do not know of a single instance of its occurrence in Cornwall, while in Somerset it has only been obtained once. The Rev. Marcus Rickards wrote to tell us that one had been caught alive in a net, together with some Sky-Larks, at Wraxall, near Bristol, about the year 1874. This Lark in its summer home has a delightful song, and in Lapland is called the "Bell-bird," from its clear and musical call-note. Those caught alive by bird-catchers in England are in great esteem as cage-birds, and we have often seen them in aviaries.

An adult specimen in the collection of the late Mr. Cecil Smith is said to have been shot at Paignton. This bird was given us by Mr. E. Burt, of Torquay, and we subsequently presented it to Mr. Smith. Mr. Burt, however, was doubtful about it. Mr. Hutchinson, of Bideford, saw a flock of Shore-Larks on Northam Burrows, January 2nd, 1875, and shot one ('Field,' as quoted in Zool. 1875, p. 4337).

Two specimens said to have been obtained on Dawlish Warren are in the A. M. M. and the collection of the late Mr. Byne respectively. They both came from James Truscott, the Exeter bird-stuffer, and were most probably mounted from American skins. We have reason to believe that the reported finding of a nest and eggs of this species at Exmouth (Zool. 1852, p. 3707) was a mistake.

Order PICARIÆ.

Suborder CYPSELLI.

Family CYPSELIDÆ.

THE SWIFTS.

The Swifts are now removed from their old position among the Hirundines, and are included among the Picariæ. We have only one of them, the well-known Common Swift, which is a generally dispersed summer visitor in this country, while another fine South-European Swift, the Alpine Swift, has as yet been but once detected as a chance straggler in the north of the county. We have already dwelt at length upon the Swift when we were engaged with the Swallows, as from old associations we are still led to couple the Swift with its familiar companions.

There is this to be said in favour of separating the Swifts from the Swallows, namely, that the pure white eggs of the former are very dissimilar in shape to those of the latter, and are only two in number, agreeing in these respects, as well as in others, with the Humming-birds, to which some ornithologists consider the Swifts to be allied.

Swift. *Cypselus apus* (Linn.).

[Devil's Screecher, Skeer Devil (*skeer*, to move along swiftly and slightly touching).]

A summer migrant, usually very numerous throughout the county. Breeds.

Arrives at the end of April or beginning of May, and leaves about the second week in August. This year (1891) two were seen near Kingsbridge on April 26th, but the earliest arrival noted by us was on April 27th,

1883. Mr. Gatcombe saw one April 28th, 1871, near Plymouth (Zool. 1876, p. 4992).

Mr. Cornish is reported to have seen one in Devonshire on November 27th, 1835 ('Yarrell's B. Birds,' 4th ed. ii. p. 365). On September 2nd, 1876, at Torrington, a Swift was observed repeatedly flying in and out of a hole beneath the eaves of a thatched house, where no doubt she had young. The Swift usually leaves North Devon about August 14th (G. F. M., Zool. 1876, p. 5165). On the 4th October, 1876, about a score were seen near Ilfracombe (H. E. Rawson, Zool. 1880, p. 108). Mr. E. A. S. Elliot saw one September 27th, 1886, at Pinstow, near Kingsbridge. Near Plymouth it has been seen as late as August 29th (1851 and 1883) by Rev. R. A. Julian and Mr. Gatcombe ('Naturalist,' 1852, p. 7; Zool. 1883, p. 422); and on the same day in 1890 at Exmouth (W. D'U.).

Swifts have become more numerous in the immediate vicinity of Plymouth than either Swallows or Martins (J. G., Zool. 1876, p. 4992). On Dartmoor they are said to breed in holes in the stone boundary-walls (W. W. B., *v. v.*). Swifts are certainly very numerous on the moor in summer, and there are no other available nesting-places for them except in some of the rocky tors. In Exeter, where they are very abundant, they breed under the roofs of houses, squeezing themselves in between the barge-boards and the walls, where one would think it impossible for them to pass, but their flattened form enables them to do so with ease. A gamekeeper informed us that, in the woods on the slopes of the Haldons, Swifts nest in holes in trees. At Berry Head and Beer Head they breed in the cliffs (J. G., Zool. 1872, p. 3168). We have observed that the food of these birds principally consists of small Coleopterous insects, the elytra of red-coloured species of *Aphodius* being conspicuous in their droppings.

The wild scream of the Swifts, as they rush through the air in sportive chase of one another, is one of the accompaniments of summer life, and there are hardly any localities which know them not. They place their nests in crevices of the cliffs overhanging the sea, in church towers, in holes beneath the eaves of cottages, and in the cistern-heads of water-shoots on mansions in fashionable squares, so that town and country and sea-shore are familiar with their presence, and on the moors they nest in fissures in the granite tors. Swifts have been captured and marked, and in this manner it has been ascertained that the same birds frequent the same quarters year after year. The largest of our (generally so-called) English Swallows, with the exception of the White-bellied Swift, an occasional visitor only, the Swift is the last to arrive and the first to leave us, spending only three clear months in this country, and is, apparently, more sensitive to the cold than the other species, as, after a "cold-snap" in May, Swifts are often to be picked up dead and dying upon the ground. One May, after a week of very cold weather, there was a sudden change to a genial westerly wind with warm showers, and by a trout-stream we found Swifts and all the customary British hirundines feeding ravenously upon the insects which infested the stream; so eager were they after their prey that they continually pounced upon our

artificial flies trailing behind us, and, in spite of all we could do to warn them off, we had the misfortune to catch several of the Swifts which swallowed our hook. Disengaging them as tenderly as we could we restored them to liberty.

The Swift is nearly unable to rise on wing from the ground, as it can give itself no impetus with its legs, which are very short and are furnished with tiny feet armed with sharp, prehensile claws, with which it clings to the vertical sides of cliffs and buildings. The Swift is a regular visitor to Lundy Island, and nests there. In the winter time the Swift is very numerous in Upper Egypt, Natal, and at the Cape of Good Hope.

White-bellied Swift. *Cypselus melba* (Linn.).

[Alpine Swift.]

An accidental visitor of extremely rare occurrence.

An immature specimen was shot and two others were seen near Ilfracombe, October 4th, 1876 (H. E. R., Zool. 1880, p. 108). They were flying about the cliffs in company with about a score of Common Swifts.

Some fine examples of this large Swift in our collection were taken by Mr. G. F. Mathew, R.N., off the rocks on which they were roosting in Turkey; they were clinging to the face of the cliffs as tight as limpets. This rare visitor to our country is to be recognized in a moment by its pure white underparts from the Common Swift, which is all over of a greenish black. It is also considerably larger.

Two specimens of this species have been secured in Cornwall, and another was seen at sea forty miles to the west of the Land's End. In the county of Somerset one is said to have been obtained, and is probably the example included in Mr. Baker's List of the birds of that county published in the Proceedings of the Somerset Archæological and Natural History Society for 1850 (C. S., B. of Somerset, p. 287).

In its habits the Alpine Swift does not differ from the Common Swift, and arrives at the Cape of Good Hope at the same time as our common and well-known bird.

Family CAPRIMULGIDÆ.

Nightjar. *Caprimulgus europæus*, Linn.

[Goat-sucker, Fern-Owl, Night-Crow, Dor-Hawk: *Dev.*]

A summer migrant, common about woods, ferny heaths, and orchards, especially on the borders of Dartmoor and in the south of the county. Breeds.

It usually arrives at the end of April or early in May, and departs generally at the end of September, but we have often seen it as late as

the middle of October. Mr. Gatecombe noticed its appearance on April 10th, 1872, at Plymouth (Zool. 1872, p. 3258). Montagu mentions having shot one in Devonshire, November 8th, 1805 (Orn. Dict., Suppl.); and Dr. E. Moore saw a pair in an orchard near South Milton on November 10th, 1828 (Trans. Plym. Inst. 1830). One occurred in Cornwall, November 27th, 1821.

This beautifully marked and singular-looking bird is very partial to commons and the borders of woods covered with bracken, in which it conceals itself during the day, coming forth in the gloaming to hunt for the night-flying insects which form its food. In the daytime it often roosts on the branch of a tree, perching in the direction of the branch, and not crossways like other birds. The nest is placed on the ground, usually near a tree, and is nothing more than a depression chosen by the bird, and here it lays two marbled eggs, which are among the most beautiful of eggs laid by British birds. When entomologizing late in the autumn we have often been annoyed by Fern-Owls. The blossoms of the ivy are a great attraction to Noctuæ, and visiting them at dusk to secure specimens we have been much interrupted by these birds, which would come and snatch the moths off the ivy, or intercept them in the act of settling within an inch or two of our face, and it was natural to conclude that the individual carried off by the bird was some special rarity—perhaps a “Tawny Pinion” or “Dotted Chestnut.” We were obliged at last to take a gun with us and to send a shot at the bird as a hint to betake itself elsewhere for its feast of Lepidoptera. When these birds are disturbed in the daytime they are very foolish, and seem only half awake, and are not difficult to capture. Immature birds may often be seen on the south coast in September, pitching on garden-paths in the daytime, and are very tame and stupid. Their note is a curious squeaking cry, which they utter in the evening, when they rouse themselves to come forth to feed. They also make a sound like the spinning of a wheel or the tearing of a piece of calico or silk, produced while perched with the head downwards. The tints of this bird’s plumage—different shades of brown in curious streaks and patches—are very similar to those of the Wryneck, and corresponding closely with the colour of the bark of trees, materially assist it in concealing itself on its roost.

The male bird only differs from the female in having a patch of white on each of the inner webs of the first three primaries, and in having a white band across the edge of each outer tail-feather.

The Fern-Owl captures its insect-prey with its foot (like a Kestrel) and has the inner edge of the middle claw serrated for the purpose of giving it a firm hold upon the slippery backs of beetles. In September 1871 we were shown the contents of the stomach of one, mainly consisting of the elytra and thighs of Dor Beetles (*Geotrupes*). It is said to be especially fond of the Ghost-Moth (*Hepialus humuli*), so very numerous flying over grass-fields at dusk in June and July—

“The busy Dor-Hawk chases the White Moth
With burring note.”—*Wordsworth*.

Like many others of the Picariæ, such as the Wryneck, Woodpeckers, &c., the Nightjar has a viscid saliva which helps it to secure small insects, and its wide mouth is armed with stiff bristles on either side to prevent the escape of struggling prey.

In September we have sometimes flushed Nightjars in turnip-fields, and, when pheasant-shooting at the end of October, and posted at the corner of small fir-plantations, have had them driven out to us by the beaters.

A friend, in returning from fishing, was walking through a wood when a bird flew low towards him along the path. Striking it with his rod it fell dead at his feet, actually dropping upon its nest, in which were two eggs. This poor bird and her eggs came, in this singular manner, into our collection.

We have often been amused by the actions of Nightjars when we have come upon their young. They tumble and twist about in the air close to the intruder, feigning to be wounded, and employ all their art to decoy him from the spot.

The Nightjar is a summer visitor and common breeder on Lundy Island (Trans. Devon. Assoc. viii. p. 308).

Mr. Comyns, of Mount Pleasant, Dawlish, possessed a pied specimen (J. C. B., Nat. Hist. S. Devon, p. 208).

Observation.—Two other species of Nightjar have occurred in England, namely, the Red-necked (*C. ruficollis*, Temm.) and the Egyptian (*C. ægyptius*, Licht.). The first has been shot once in Northumberland and the second twice in Nottinghamshire and Cambridgeshire. Other examples of these species may have visited this country and been mistaken for the Common Nightjar.

Suborder P I C I.

Family PICIDÆ.

THE WOODPECKERS.

In spite of numerous woods and finely timbered lawns and parks, we cannot claim for the West Country that it is much beloved by the members of this important family, who, in general, make their home and seek their food among the trees, and are more often heard than seen. They are all of bright and conspicuous plumage, easily to be known as they pass from tree to tree by their dipping flight; they are noisy and clamorous, and their presence

is often revealed by the tapping of their bills on the trunks of the trees, or by the curious jarring sound they make with their bills against the branches. They are partly insectivorous and partly fruit-eaters, and do good service in destroying the larvæ of moths and beetles which prey upon the wood, and are all furnished with curious long tongues and glands for supplying them with a viscous fluid, by means of which they easily capture myriads of ants and minute insects. The tongue-bones are of immense length, curling up over the back of the skull, so that the tongue can be shot forth or retracted at will. Its tip is armed with a barbed and horny point, by means of which grubs deep in the wood of a tree can be speared and drawn out through the hole made by the bill.

The Green Woodpecker is the only one of the family to be considered at all common in Devonshire; the handsome Great Spotted Woodpecker is rare, and the Lesser Spotted Woodpecker, although more numerous, is extremely local; while the Wryneck is only a casual visitor to the county, although a common summer migrant in many parts of the kingdom.

[Great Black Woodpecker. *Picus martius*, Linn.

Dr. Latham says he had been informed that this species is sometimes met with in the South, and in particular in Devonshire (Gen. Syn., Suppl. 1787, p. 104). According to Dr. E. Moore a specimen was in Mr. Newton's collection which was shot near Crediton (Rowe's Peram. Dartmoor, 1848, App. p. 223). Prof. Westwood has stated that Mr. C. Robertson, of Oxford, assured him that he had repeatedly seen this bird in the woods at Clovelly, and that Mr. Jackson, of New College, had observed it in East Devon (Proc. Ent. Soc. November 20th, 1871, as reported in Zool. 1872, p. 2914). The Rev. Clement Ley says he saw one at Mount Edgumbe in 1876 (Zool. 1888, p. 279, and 1889, p. 341).

The above evidence of its occurrence in this county is decidedly weak, and no importance can be attached to it, as no specimen has been obtained, except the one mentioned by Dr. Moore, which is still in the

possession of Mr. Newton's family, though in a very bad state of preservation, and has been seen by us, and is a female bird. There was, however, possibly some mistake about its being killed in this county. This fine Woodpecker is only to be found in pine-forests, and is therefore most unlikely to occur in England. It is not admitted into the British List in recent works on ornithology.]

Great Spotted Woodpecker. *Dendrocopus major* (Linn.).

[French Pie, Pied Woodpecker, Magpie Woodpecker.]

Resident, but more often met with in winter and spring than at other times of the year, and probably some arrive from the continent late in the autumn.

Though not common anywhere this Woodpecker appears to be generally distributed throughout the county in wooded districts. It is occasionally seen at all times of the year in woods near Plymouth, Slapton Ley, Kingsbridge, Bovey Tracey, Ashburton, Chudleigh, on the slopes of the Haldons, Exwick Woods near Exeter, Rousdon, and in North Devon.

A nest was obtained in Ham Woods in 1835 (E. M., Rowe's Peramb. Dartmoor, p. 233). Mr. T. R. A. Briggs found a nest with young in a hollow oak in Saltram Wood, June 14th, 1860. It bred in the woods by the side of the Tamar in 1877 (J. G., Zool. 1877, p. 494). It is also known to have bred on Haldon and in Exwick Wood.

Some years since Mr. T. Wrey Harding, of Upcot, near Barnstaple, informed us that a pair of the Great Black Woodpecker bred annually in his beautiful grounds; but this we found to be a mistake, the birds in question being the Great Spotted Woodpecker, and to this confusion between the two birds we have little doubt many of the reported occurrences of the fine Scandinavian Woodpecker in this country must be traced. In North Devon the Great Spotted Woodpecker, an extremely handsome bird, with its vividly contrasted colours of red, black, and white, can only be considered rare, mostly affecting mazzard orchards, in which a fine pair in our collection were obtained, and fruit-gardens; we have also seen it sometimes in parks and woods, where tall poplar trees seemed its favourite haunt; but it is certainly the scarcest of the three English Woodpeckers in the West Country. In the collection of birds at Westward Ho! College there is an example obtained in a fruit-garden. It is said to be fond of fruit having kernels which it can crack, hence its partiality to the mazzard orchards, the "mazzard," as everybody knows, being an extremely sweet and juicy little black cherry, abundantly cultivated in some parts of the county. From its habit of creeping round the tree on which it is feeding when any one approaches for the purpose of concealment, and from the success of this manoeuvre, it may not be quite so rare as it is generally supposed to be.

It has a monotonous note, oft repeated, of "quet, quet," and makes

a strange vibrating sound by inserting its beak into the crack of a limb of some large tree; this it does chiefly in the spring and autumn, and then, by a quick tremulous motion of the head, a sound is produced as if the tree was splitting, and this is said so to alarm the insects that they hasten out from their crevices and become an easy prey.

It is much more common in the Midland and Northern Counties than it is with us in the West, and has been noticed to be a regular migrant, arriving annually on our N.E. coasts about the same time as the Woodcock. It is seldom seen on the ground like the Green Woodpecker.

Lesser Spotted Woodpecker. *Dendrocopus minor* (Linn.).

Resident, and not uncommon in woods in some localities. Breeds.

This species appears more plentiful in spring and autumn than at any other time, according to Mr. Gatecombe (Zool. 1875, p. 4404); but in our experience and that of Mr. Bolitho, of Plymouth, it is most frequently obtained in the months of January, February, and March, chiefly because the trees are then destitute of foliage. Owing to its small size and its habit of concealing itself behind the branches of trees it is easily overlooked. It is, however, often observed on elm trees in gardens in Exeter, Topsham, Teignmouth, Plymouth, Seaton, Barnstaple, &c. It is rare at Kingsbridge (R. P. N.). Dr. W. R. Scott found the nest in an old apple-tree near Exeter in 1847 (Zool. 1849, p. 2384). A pair used to breed in an old walnut-tree at Alphington, near Exeter. This Woodpecker breeds in woods at the side of the Tamar (J. G., Zool. 1877, p. 494).

We have found this small species to be far from uncommon in the wooded districts of Devon and Somerset; in the moorland county of Cornwall it is, as might be expected, very rare. In North Devon we have often met with it in woods and parks; also on old rails and gate-posts, and have observed it to be very common by the banks of the Taw below Mr. C. Chichester's beautiful seat, Hall; and can bear out Mr. E. H. Rodd's description of its call-note, which he aptly compares with the roosting-ery of the Blackbird. Like the Great Spotted Woodpecker it is fond of fruit, and will go some distance to visit gardens. One summer a brood paid such persistent visits to the garden of a friend of ours at Instow, a small watering-place situated among sandhills, with no woodlands immediately near, that three of them had to be shot before the rest could be driven away from their attacks on the raspberries and currants. We have watched a fine male Lesser Spotted Woodpecker while performing with its beak upon a branch of an old wych-elm in our grounds, and felt astonishment that so small a bird could produce such an extraordinary noise. We have followed one to a large tree, waiting for it to show itself upon the trunk; but the bird has kept itself concealed in the upper branches, which it mostly affects, and its nest is generally placed high up, a hole in a poplar tree being a favourite site.

Green Woodpecker. *Gecinus viridis* (Linn.).

[Woodwall, Woodawl, Woodwalf, Woodmaul, Hoodall, Hoodwall, Ooodall, Oodmall, Parrot Woodpecker: *Dev.*]

Resident, generally distributed and sometimes numerous. Breeds.

There appears to be a considerable immigration of the Green Woodpecker into the West of England in severe winters, as so many are killed at such times. Its attractive plumage leads to its destruction by every gunner who comes across it, and many are taken to the bird-stuffers. We find that forty-nine specimens were brought to Mr. Bolitho, of Plymouth, for preservation in twenty-one years (1852-73). Mr. Gatcombe found it remarkably numerous at the landslip at Dowlands, near Axmouth (*in litt.*), and it frequently visits seaside gardens at Budleigh Salterton in quest of ants. It breeds in holes in old trees near Exeter, Kingsbridge, &c. Young birds were unusually plentiful near Plymouth in July 1880, when many were caught alive and others killed in various ways (J. G., Zool. 1881, p. 51).

This species was unknown in the West of Cornwall until 1876 (Rodd, Zool. 1876, p. 4796).

This beautiful bird is common in all wooded parts of the county. There is a general idea that it becomes very noisy before rain, hence it is in some districts called Rain-bird; but in our experience it is always clamorous, especially about the time when it is feeding its young brood, and when these first emerge from the nest, and we have long ceased to regard its cry as a weather sign. Its food consists of insects, which it searches for on the limbs of trees, commencing its inspection at the bottom of the trunk and ascending upwards in a spiral, grasping the bark with its strong feet and pointed claws, pressing close against the tree with the keel of its breast-bone, and using its stiff tail-feathers as a support. These habits are common to all other Woodpeckers, whose wedge-shaped bills are powerful instruments for digging out from decayed portions of the tree the insidious larvæ of the Goat-Moth (*Cossus*), or of the beetles of the longicorn order, which are mining into it and destroying it. Although chiefly arboreal in its habits, the Green Woodpecker gladly descends whenever it detects an ants' nest, being very fond of these minute insects. We have sometimes flushed it in salt marshes, by the side of little rushy pools, where it must have been seeking variety in the shape of worms and small crustaceans. Like the other Woodpeckers, the Green Woodpecker is said to be able to make the strange vibrating sound with its bill; but we imagine it does not do this so frequently as the other two English species, as we have never observed it doing so. We have seen small birds chasing a Green Woodpecker as if they had taken it for a Hawk. The speckled plumage of young Green Woodpeckers appears to puzzle people, as we have often had them sent to us as rare and unknown birds. Placing our hands against the outside of a Green Woodpecker's nest in some hollow tree we have been astonished at the heat occasioned by the young birds within. The Green Woodpecker

sometimes takes the trouble to excavate several holes before finally choosing one for its nest, and is very rapid in its carpentering, as may be judged from the quantity of "saw-dust" lying on the ground beneath the trees.

Wryneck. *Ijnx torquilla*, Linn.

[Long-tongue, Emmet-hunter, Snake-head.]

A casual visitor of rare occurrence.

Mr. Elford only once saw this bird in Devon (Polwhele, Hist. Devon, i. chap. 6). According to Mr. Comyns it was not uncommon in the neighbourhood of Dawlish, and had bred there. He had two fresh specimens in his possession in May 1829 (E. M., Trans. Plym. Inst. 1830; Mag. Nat. Hist. n. s. 1837, p. 227). Specimens occurred at Leigham, Millaton, and Ham, near Plymouth, and one was caught by a limed twig on Lipsom Hill in July 1831 (E. M., Rowe's Peramb. Dartmoor, 1848). It has occasionally been observed in the vicinity of Teignmouth and at Ashburton (T. & K.). One was shot at Topsham, May 30th, 1841 (F. W. L. R., MS. iii. p. 82). One was obtained at Pennycomequick, near Plymouth, March 25th, 1852 (J. G., 'Naturalist,' 1852, p. 131. and J. B., *op. cit.* 1853, p. 204). In August or September 1858, Mr. G. F. Mathew shot a young specimen in North Devon ('Naturalist,' 1866, p. 357). One flew against the Eddystone Lighthouse, April 14th, 1875 (J. G., Zool. 1875, p. 4490). There are specimens in the Torquay Museum from Ilsham and Torquay, and in A. M. M. probably from the neighbourhood of Exeter, from Dr. W. R. Scott (Zool. 1849, p. 2384) and Mr. Ralph Sanders, but none have occurred there for many years. Mr. R. P. Nicholls, of Kingsbridge, informs us that about six have been met with in that neighbourhood in twenty-five years. A boy shot one on a grass-plot behind a house at the top of Kingsbridge, September 6th, 1878 (E. A. S. E., MS. Notes). Mr. Seaward, of Exmouth, has a specimen shot at Topsham during the past summer (1891). The Wryneck is a very rare straggler at the period of the autumn migration in North Devon, the only example we ever saw being one which was shot in a clover-field on high ground when we were after the Partridges in September.

But where the bird most abounds it is, however, seldom seen. The colour of its plumage harmonizes so well with that of the bark of trees that we have looked up in vain for it into some hedge-row elm from which we have heard proceeding its singular and unmistakable cry, which not a little resembles that of the Kestrel. The Wryneck has the same elongated tongue which is peculiar to the Woodpeckers, but it has not the stiff tail on which the Woodpeckers balance themselves in ascending trees, and is, in consequence, more of a percher than a climber. Its favourite food consists of ants, and these it picks up with its tongue, darting at them with such rapidity that its motions almost escape the eye, securing them with a sticky secretion at the tip. The bird gets its

name from a curious habit it has of twisting its head and erecting the feathers on the crown, giving it a very singular appearance. In Wales one of its names is the "Cuckoo's Mate," but it has nothing to do with the Cuckoo beyond arriving in this country about the same time as that herald of the spring. The plumage of the Wryneck is very compact and silky, of different shades of chocolate-brown and grey, much diversified by wavy bars of darker colour and arrow-head markings. Although of such inconspicuous shades it is a very handsome bird. The old birds make a hissing noise when surprised in their nest, erecting their crest and writhing their necks. The nest is generally in a hole in a tree, and in other parts of England we have taken its shining white eggs from a pollard willow by the side of a stream. We have never known an instance of its nest in Devonshire, although in Somerset it is not uncommon throughout the summer and breeds regularly. One hot summer's afternoon, when we had to wait a long time for our train at a small station in West Somerset, we were much entertained by watching a young Wryneck, our only companion on the platform, as it searched all the white-painted railings one after the other for any small insects lodged upon them. It was quite indifferent to our presence, coming within a few inches of where we stood.

Suborder ANISODACTYLÆ.

Family ALCEDINIDÆ.

Kingfisher. *Alcedo ispida*, Linn.

Resident and not uncommon about rivers, streams, and ponds, both in the north and south of the county, but rare in the central part. Breeds.

An extensive immigration takes place early in September, so that the Kingfisher is most plentiful in the autumn and winter months. At that period of the year many frequent the estuaries of our rivers, and are frequently seen on the sea-shore both in summer and winter, especially at Berry Head (J. C. B., Nat. Hist. S. Devon, p. 412). Severe seasons are very destructive to this bird. In the winter of 1845-46 we saw five specimens which were found dead with their feet frozen to the gunnel of a boat moored in the Exe off a marsh-bank near Topsham (W. D'U.). Mr. Bolitho, of Plymouth, had sixty-seven brought to him in twenty years (1852-1872). Kingfishers were numerous at Plymouth in the winters of 1852-53, 1853-54, 1858, and 1862; as they always are when the weather is severe. In November 1873 they were very plentiful on the coast and up the estuaries, and many were almost daily brought to the bird-stuffers' shops. One man boasted of having killed thirteen within a few weeks. Again, in November 1876 many were seen on the coast, whilst in the autumn of 1880 none occurred. They were again plentiful in the autumn and December of 1883, and in January 1885 thirty or forty

were received by the Stonehouse bird-stuffers (J. G., Zool. 1874, p. 3827; 1877, p. 45; 1878, p. 54; 1879, p. 114; 1881, p. 54; 1884, p. 55; 1885, p. 376). In September 1868 Kingfishers were unusually plentiful on the River Teign (J. H. G., Zool. 1868, p. 1454). Six or seven were seen in one afternoon in September 1874 near Instow, N. Devon (G. F. M., Zool. 1874, p. 4252). The late F. W. L. Ross, of Topsham (MS. Journal, vol. iii. 1841, p. 110), records that a young Kingfisher was brought to him on May 25th taken from a hole in the Red Sandstone cliffs on the banks of the River Clyst behind Topsham, where a pair had bred for seventy-five years. The young were fed on small prawns [*Palæmon varians*, extremely abundant in tide-pools and salt ditches in the neighbouring marshes]. A few pairs breed close to Exeter on the banks of small streams. Mr. Nathaniel Lloyd told us on 5th May, 1884, that on the 2nd of that month he had found three nests near Cullompton within half a mile of one another. One had a handful of fish-bones at the end of the hole, another had seven eggs hard set, and the third contained five half-fledged young birds (W. D'U.). The Kingfisher breeds in the Kingsbridge estuary and on the Avon (R. P. N., MS. Notes).

The Kingfisher is one of the common objects of country life, and one of the most beautiful, generally to be observed flying low over the surface of a stream with straight and rapid flight, looking like a living gem in the sunlight. The bird has a shrill, mouse-like cry, which often betrays it before it is seen. We have heard it asserted that the Water-Ouzel and Kingfisher do not usually frequent the same streams, and, to a certain extent, our experience is that this holds good. But we have not unfrequently seen the two birds by the same water when fishing, although the Kingfisher more often seeks stiller brooks than the rushing trout-streams loved by the Dipper, and by the sides of ponds in salt marshes, or by the sea-shore, or by the quiet shallows and backwaters of sluggish rivers fringed by overhanging willows and rank aquatic plants, prefers to sit in wait for the tiny fish which form its prey. Except just after the nesting-season it is not a common sight to observe more than a single Kingfisher at a time. For the most part the bird is a solitary hunter. We have, occasionally, in the summer time, in some favourite spot, come across five or six together, a little party composed of the young of the year and the old birds. Peeping carefully over a flood-gate, where there is a little pool below with stone walls on either side, or stakes suitable for perches, a very interesting scene may be enjoyed, and, if we keep still, one of the old birds may be seen to make a sudden dart into the water, emerging with a minnow or some other small fry, which it will proceed to give to one of its excited young ones, quivering its wings and calling shrilly to be fed.

The nest and nesting-habits of the Kingfisher have been often described, by no one, perhaps, more carefully than by Col. Montagu, who devoted much study to this beautiful bird, and, as it was no doubt more plentiful in his day than it is now, had better opportunities for observing it. He noticed that whenever a pair of Kingfishers had selected a convenient hole they would repair to it whenever they wanted to regurgitate, and as

soon as a sufficient lining of castings of small bones was provided the hen would commence to lay her eggs upon them. The instinct of the birds led to the choice of a hole ascending upwards from its entrance, so that the watery fæces of the young ones might run out of the nest, and the stain of this seen at the mouth often betrayed the presence of the family within. When the old birds visit their nest to feed the young they are never observed to carry small fish in their bills, but disgorge their partially digested food for that purpose. After a Kingfisher has caught a small fish it will fly with it to its station, and then hammer it about the head until it has killed it, when it is invariably bolted head foremost.

One day when we were fishing, a Kingfisher coming suddenly upon us round a sharp bend of the stream dashed itself against our fly-rod, falling into the water after the contact, but, soon recovering, rose again on wing, and went off with its usual rapid flight.

Where a drain discharges itself from a marsh into a tidal river, and there is a small culvert and sluice, we generally expect to meet with a Kingfisher, this being a favourite feeding-station, and in such a spot, should the Kingfisher be shot, his place will soon be occupied by another, just as a big trout is succeeded when captured by the next biggest in the favourite hover, or a Woodcock, flushed and bagged from some warm shelter beneath a holm-bush in the cover, is replaced, perhaps the very next day, by another Woodcock which has appropriated what, to a Woodcock's eye, is the best place in all the wood in which to nap throughout the day.

A few years since when the cruel fashion prevailed (and would that we could record that it had been now abandoned!) for ladies to decorate their hats and bonnets with brightly plumaged birds, the poor Kingfisher was so persecuted that, in our despair, we looked forward to his speedy extermination. But, whether it be the case or not that the stress of this foolish fashion does not now press so hardly upon this beautiful ornament of our brooks and shores, we are pretty confident that of late years (perhaps through the help of immigrants) his numbers have been recruited, so that he is still to be met with at many of his accustomed haunts.

Family CORACIIDÆ.

Roller. *Coracias garrula*, Linn.

An accidental visitor of very rare occurrence, and almost confined to the southern part of the county.

So brilliant is the plumage of this handsome bird, which is about the size of a Jay, that its arrival in this country from the South cannot long be kept a secret, or the stranger escape dangerous notice and pursuit. It is an insect-feeder, chasing and capturing moths and beetles on wing, and, like our well-known Swallow, is a fissirostral or wide-gaped bird. Like

the Kingfisher and the Bee-eater, it places its nest in a hole in a bank or tree.

A specimen is recorded by Mr. F. W. L. Ross (MS. Journ. iii. p. 59) as having been obtained at the hamlet of Daleditch, near Budleigh Salterton, in September 1841. One was shot at Alphington, near Exeter, on October 20th, 1866, by Mr. Edmund Hart, and is still in the possession of Mrs. Hart. Mr. J. Gatecombe examined a male shot on June 21st, 1866, at Spriddlestone Farm, near Yealmpton, which is now in the collection of Mr. F. C. Hingston, of Plymouth. Mr. J. Brooking Rowe gives the date of occurrence of this specimen as June 20th, 1865 (MS. Notes). It was killed in a hay-field, and is reported to have been bold and fearless. It was a fine male, and a female is said to have been in company with it, but was not obtained. The stomach contained beetles and the skins of long whitish grubs or caterpillars.

Only one example, as far as we know, can be recorded from North Devon, which was shot in a ploughed field near Barnstaple, about 1850, and brought into that town to be preserved.

Mr. E. H. Rodd recorded four obtained in the Land's End district, and we have seen a very fine one in the Truro Museum, which had no particulars as to date, locality, &c., but was, probably, a Cornish bird. Mr. Cecil Smith knew of only one Somerset example, shot many years ago, near Orchard Portman, which was in the possession of the late Master of the Staghounds, Mr. M. Fenwick-Bisset, at Bagborough House.

Family MEROPIDÆ.

Bee-eater. *Merops apiaster*, Linn.

An accidental visitor during the summer months of rare occurrence, and only in the southern part of the county.

The Bee-eater is another chance visitant to this country from the sunny south, of brilliant green plumage, and is of scarcely more frequent occurrence than the Roller. It is a great persecutor of bees, which it quickly devours, and derives its name from its fondness for them, catching and swallowing them while on the wing.

A specimen said to be from Devon was in the National Collection, and was presented by Mr. Addis Archer. One occurred at Leigham in April 1818; another at Ivybridge, 1822; and another was in the collection of Mr. J. B. Rowe, of Plymouth (E. M., Trans. Plymouth Inst. 1830, p. 315; Mag. Nat. Hist. 1837, p. 180; Rowe's 'Peramb. Dartmoor,' 1848, App. p. 233). One was obtained in the neighbourhood of Ashburton (A. G. C. T.). A male occurred near Malborough, a few miles from Kingsbridge, May 22nd, 1855; it was shot in a newly ploughed field, apparently searching for insects, remains of which were found in its stomach; and is now in Mr. Henry Nicholls's collection (H. N., Zool. 1858, p. 6143, and MS. Notes). A bird supposed to be a male Bee-eater was seen twice at Culmfoot, and

at Stoke Wood, near Exeter, on July 17th and August 13th, 1889 (D. & E. Gazette, August 16th, 1889; and L. M. Kennaway, Zool. 1890, p. 100).

At Helston, in Cornwall, a flock of twelve appeared in May 1828, eleven being shot. A smaller flock of four was seen in the parish of Madron in 1807. In Somerset, a small flock appeared at Stapleton, near Bristol, by the banks of the Frome, at the beginning of May 1869, and three were shot, one of them being now in the collection of Mr. A. Clayfield Ireland, of Dowrich House, Crediton. In Dorsetshire a Bee-eater was shot at Chideoch, and was in the collection of Dr. Roberts, of Bridport. Another was shot at Swanage.

Family UPUPIDÆ.

Hoopoe. *Upupa epops*, Linn.

A summer migrant of irregular occurrence, principally in spring and autumn, most frequently obtained in the South Hams, especially in the Plymouth and Kingsbridge districts, and on Lundy Island. It has been known to breed in Devon (T. & K.) A nest with four young was taken in a wood close to the house at Morwell in the parish of Tavistock (T. J., Bray's 'Tamar and Tavy,' 1st ed. i. p. 350, 1836).

The remarks which we made respecting the spring migration of the beautiful Golden Oriole to our S.W. coasts apply also to the singular and handsome Hoopoe, which, if it could escape slaughter, would become a regular visitor to this country, and would nest in many places where it now vainly seeks for shelter and hospitality. A slightly wounded Hoopoe was brought to our lamented friend Mr. W. Brodrick, when he was living at Budleigh Salterton in 1865, which he kept alive in his garden for several years. It was a most entertaining bird, and we have seen the clever sketches of it in all manner of postures which came from Mr. Brodrick's skilful brush. It was very fond of perching upon a rail, where it swayed its body to and fro, as if it was continually making obeisance, unfolding and closing its beautiful crest-feathers like a fan.

Handsome as this bird is, it is nevertheless a filthy feeder, frequenting manure-heaps. It lines its nest with dung, and from this habit is called "Stink-bird" in some places on the continent, and the hen-bird is said never to leave her nest, which becomes filled with her mutings.

Strangely enough, the first recorded occurrence was in winter. Mr. Perring shot a Hoopoe in December 1790 near Little Dartmouth (R. P., Hist. of Devon, vol. i. chap. 6). It has been shot at Teignmouth, and has frequently occurred in the neighbourhood of Totnes and Ashburton (T. & K., 1830). "Several have been shot here [Plymouth], one was shot at Warleigh, the seat of the Rev. Walter Radcliff, another by Mr. Comyns in September 1828 on Kenton Warren, two are in the collection of J. Newton, Esq., of Bridestowe, near Tavistock. In 1827 two out of a flock were shot at Saltram by Lord Morley's keeper, and three were obtained near Plymouth in 1830. Specimens are in the collection at Ham, at Mr. Rove's, Mr. Drew's, and Bolitho's" (E. M., Mag. Nat. Hist. 1837, p. 176).

One alighted on a mackerel boat between the Eddystone Light and Plymouth Breakwater in an exhausted condition, April 21st, 1853 (J. B., 'Naturalist,' 1853, p. 204). One on April 27th near Plymouth, and another on the 29th of the same month 1854 on Dartmoor. Others were seen at the same time. One at Plymouth at the beginning of May 1871. A female at Saltash, near Plymouth, April 19th, 1883 (J. G., 'Naturalist,' 1854, p. 209; 'Zoologist,' 1871, p. 263S; 1883, p. 419). A male was received from Plymouth April 19th, 1858, and one from Anthony (on the Cornish side of the Hamoaze) April 11th, 1859 (B., MS. Notes).

One killed at Bigbury, from Col. Montagu's collection, is in the National Collection. Six were obtained near Kingsbridge between the years 1840 and 1847. One of these was shot by Mr. Pearce, September 20th, 1844 (H. N., Zool. 1847, p. 1694, and MS. Notes). One on the banks of the Avon, near Kingsbridge, September 1870, shot by Mr. J. Goodman, is in Mr. Henry Nicholls's collection. One was shot on Slapton Sands by Mr. Toll September 1878, and one (probably the same as the last bird) was seen flying about for several days in a small orchard at Ticket Wood, near Kingsbridge, in the same month. One shot at Pamflete, September 11th, 1885. One seen between Loddiswell and Avelton Gifford, April 13th, 1886, by the Rev. M. Gueritz, and afterwards shot ('Field' for April 26th, 1886), was probably the same as the male shot by Mr. E. A. S. Elliot, April 16th, 1886, near Knap Mill, and as the one mentioned by Mr. Gatecombe (Zool. 1887, p. 376); its stomach contained "phryganeous" larvæ. A female was shot by Col. Wise at South Milton, September 25th, 1888. One frequented the Rectory grounds at Thurlestone for a few days in 1890 (R. P. N. and E. A. S. E., MS. Notes).

One at Ivybridge, September 11th, 1857, and another, May 15th, 1866 (B., MS. Notes). A pair at Ringmore, near Ivybridge, April 10th, 1872, were seen by Mr. F. C. Hingston (Zool. 1872, p. 3112).

Two, male and female, were shot at Ilsham and Torquay, and are now in the Torquay Museum (A. N., Zool. 1851, p. 3147). One occurred near Torquay, October 1876 (G. F. M., Zool. 1876, p. 5161).

One was shot near Exeter, July 2nd, 1820 (R. S.), and is now in the A. M. M. One occurred at Mamhead about 1839 (J. C. B., Nat. Hist. S. Devon, p. 202). One shot near Woodbury in August 1851, was seen by us soon after it was killed (W. D'U.). One at Budleigh Salterton in 1865 (W. B.). One was shot on Dawlish Warren, August 1882, and was seen by us in the flesh (W. D'U.). One was shot by Mr. H. A. Drew in a mangold-field near Exeter, September 12th, 1889 ('Field' for September 14th, 1889).

One killed somewhere near Moreton is in the possession of Mr. Pollard, landlord of the hotel at Moretonhampstead (C. S., Zool. 1885, p. 11).

In North Devon the Hoopoe has often been noticed and ruthlessly butchered. Some years ago it was seen almost every year on Lundy Island.

The Hoopoe is almost a regular visitor each spring to the Land's End district, but Mr. E. H. Rodd knew of no instance of its having nested in Cornwall. Although Mr. Cecil Smith knew of no Somerset instances of the Hoopoe, the bird has, to our knowledge, been frequently obtained in that county. In Dorsetshire it is often noticed, and is reported to have nested in two places, at Warmwell and in the neighbourhood of Sherborne. Hoopoes are also said to have nested in Wiltshire close to Salisbury. A friend who has seen the bird at large in Dorsetshire has described to us its curious dipping flight, which is low above the ground.

The Hoopoe is widely dispersed over the world, being found throughout Europe, Africa, and Asia, though some ornithologists consider certain of the Hoopoes found in the two last portions of the globe to belong to distinct species.

Suborder COCCYGES.

Family CUCULIDÆ.

Cuckoo. *Cuculus canorus*, Linn.[Gowk, Gawk, Gookoo: *Dev.*]

A summer migrant, common throughout the county.

"Cuckoo! cuckoo!" This welcome voice of the spring is to be heard very generally in the West Country, where moor, and hill, and woodland afford the strange bird with which it is identical just the land it loves. In some years, as in 1873 and 1881, it is very numerous. It arrives usually in the third or fourth week of April in the southern part of Devon. The earliest dates at which it was first heard near Exeter, within our own knowledge extending over the last forty years, are as follows:—6th April, 1864 and 1872; 7th April 1874 and 1882; 9th April, 1884. Polwhele records that a Cuckoo was heard on 10th January, 1776, near Mount Edgecumbe, and in that month in several parts of the South Hams, it being an extraordinarily mild season (*cf.* *Gent. Mag.* vol. 66, p. 117). One is said to have been heard and seen at Stoke Canon, near Exeter, March 27th, 1872; and Mr. M. V. Toll distinctly heard the Cuckoo on the afternoon of March 10th, 1884, at Strete, near Dartmouth, and saw the bird flying towards him. It passed over his head at not more than twenty yards high, calling as it flew ('Field' for March 15th, 1884).

In the extreme west of Somerset the 16th April goes by the name of "Cuckoo's Day," it being the date when the cry of the Cuckoo may first be expected. And we have found that this is a very fair average date. Once or twice we have heard the Cuckoo on April 13th; but in most years the bird does not reveal its presence until April 16th, or some day in the week following, and if cold, dry weather with N.E. winds prevails about that time, the Cuckoo, although arrived in the district, will keep silent. In very backward and cold springs we have known even the month of May, when, as the line goes, "it sings all day," to pass without his note enlivening the wintry scene. The Cuckoo is most vociferous in soft, balmy weather, especially after a warm shower, as the old country people say, "he likes a drop to moisten his throat." We have, after late springs, heard the Cuckoo on 1st or 2nd July; but it is very rare to hear the bird cry after Midsummer Day, and in some years we have listened in vain for it after 10th June.

Directly she arrives the female Cuckoo proceeds to lay, and we have found young Cuckoos strong on wing by the end of May; while we have seen others, evidently not long from the nest, as late as 10th September, proving that the Cuckoo continues to lay up to the time of her departure from this country. The adult birds appear to leave the county early in July, but birds of the year remain till late in autumn. We had quite a

young Cuckoo brought to us in North Devon late in September which had become entangled in a net spread against some late-hanging currants on a garden-wall. Mr. C. Ham saw a young bird at Morchard Bishop early in October 1878; and one was shot near Plymouth in October 1838 (J. C. B., Nat. Hist. S. Devon, p. 420). Birds of the year have been killed near Kingsbridge in the first and second weeks of October (R. P. N., MS. Notes).

The usual nests into which the Cuckoo inserts her egg (which she first lays on the ground and then carries with her beak to the home she has selected for it, thus accounting for Cuckoo's eggs being often found in nests placed in holes in walls) are those of the Meadow-Pipit, Pied Wagtail, and Hedge-Sparrow; but there are numerous other birds who are called upon to rear the young Cuckoos, a list of twenty-six having been drawn up in whose nests Cuckoo's eggs have been detected in this country. The late Rev. J. Hellins, of Exeter, furnished us with an instance of a Cuckoo having deposited her egg in the nest of a Wren, in this case having selected a tiny foster-parent indeed for her voracious young. Small birds pursue and buffet the Cuckoo whenever she appears among them, because of her Hawk-like appearance.

The Cuckoo will return year after year to the same nest when convenient. We knew of a pair of common Wagtails which had their nest in a hole in a garden-wall near to us, and as long as the Wagtails continued to occupy this hole, which they did for several years in succession, they had the annual distinction to rear a young Cuckoo. The foster-parents attend upon and feed the young Cuckoo for some time after it has left the nest, and, as Col. Montagu has described, the young Cuckoo sprawls upon the ground, lying over on one side to enable the small birds to reach its mouth, and sometimes extends one of its wings upwards for them to perch upon. For several days, one summer, a young Cuckoo, closely waited upon by two Hedge-Sparrows, frequented our gooseberry bushes when there was a great abundance of the destructive gooseberry grub (the larvæ of a sawfly), and with these it was assiduously fed by the small birds. Several times we found an adult Cuckoo at the same spot, doubtless attracted by the sawfly larvæ, but we fancied she might also have been in attendance upon the young bird. Mr. Ross saw several adult Cuckoos together under a gooseberry bush infested with these grubs in his garden at Topsham. Caterpillars of all kinds, especially the spiny larvæ of certain butterflies (*Vanessa*), and hairy larvæ of large moths, form the Cuckoo's favourite food, and good service is rendered in thus destroying the enemies to the foliage of various trees; some sociable larvæ which are very ravenous, like those of the common buff-tip moth, would in a short time strip large trees bare to their poles were they not kept under by Cuckoos and other birds, whose province it is to devour them. Mr. Gatecombe found the stomach of a Cuckoo he examined on May 9th, 1885, at Plymouth, filled with the hairy caterpillars of the fox moth (Zool. 1885, p. 377). Cuckoos have been successfully kept in this country through the winter, but they are very delicate birds, and one we had brought through his very greedy youth, and had rendered a very tame

pet, grieved us much by dying towards the end of November, when he was in fine plumage and condition, through taking a sudden and fatal cold, owing to having been put back into his cage after it had been cleaned, and before it had become completely dry.

We have never become converts to the theory propounded by some naturalists that Cuckoos lay eggs of different colours, and that the Cuckoo places its egg in the nest of that bird the colour of whose eggs most resembles her own. We have ourselves taken the egg of the Cuckoo in the nests of the Hedge-Sparrow, Sky-Lark, Meadow-Pipit, Tree-Pipit, and some other birds, and have had many other Cuckoo's eggs pass through our hands, and all these eggs were very much alike in size and colour, closely resembling an ordinary Sky-Lark's egg, and very much of the same tints.

Cuckoos, it is well known, often arrive in this country in immature plumage, and one we have shot in the act of uttering its well-known cry is still, partially, in its brown juvenile dress. We think these young Cuckoos may have been bred, perhaps, in the winter-quarters of the birds, and so were only a few months old when they reached our coasts. Various explanations have been given of the parasitism of the Cuckoo, none of them considered satisfactory by Professor Newton, in his admirable account of the Cuckoo in the 4th ed. Yarrell's 'British Birds,' vol. ii., and "*adhuc sub judice lis est*;" but we are inclined to follow those naturalists who consider that it may be rendered necessary owing to the short stay, only a little over two months, made by the old Cuckoos in this country, in which there would not be time for them in their own nest to hatch and rear the numerous family which, following the analogy of foreign Cuckoos, we believe they would have.

From much observation we have come to believe that each pair of Cuckoos on arrival select a certain district, and that an extensive one, of which they make the circuit periodically, having certain favourite meeting-stations, and that in the hedges, fields, and plantations of this district the hen-bird finds the nests she requires for her eggs, of which she lays from eight to ten, or about one a week on an average during her stay. The question arises, do all these eggs result in young Cuckoos? We think not; for young Cuckoos are rare. Perhaps they conceal themselves very cleverly, and their brown plumage is protective, harmonizing so closely with the colour of the branches of trees that they may be easily overlooked. But on the few occasions when we have met with young Cuckoos, they have always been perched awkwardly on some exposed part of a hedge, and one reared in our garden two years ago was always in evidence, sitting on a gate or rail, or to be seen flying from one apple-tree to another in the orchard.

It is rare to see more than two Cuckoos together, but, occasionally, three or four may be noticed in pursuit of a hen bird, and once we counted seven flying one after the other from a large hawthorn. The late Rev. R. A. Julian observed that these birds much frequented the sea-cliffs at Bovisand.

Cuckoos are restless birds, among the last to go to roost on a summer's

night, and the earliest to awake when the first streak of dawn appears in the east. The cry of the young Cuckoo somewhat resembles that of the Kestrel.

The fact that the young Cuckoo ejects from the nest the eggs and nestlings which are the legitimate produce of its selected foster-parents, long regarded as a fable, is now accepted by naturalists as having been satisfactorily proved, and the baby Cuckoo is said to have in its early days anatomical provisions to enable it to get rid of its companions. If two young Cuckoos are hatched in one nest the stronger contrives to get rid of the weaker, as has been witnessed by a friend of ours.

A young Cuckoo with one leg and foot only, the other limb being a mere stump, was found dead near Exeter, July 12th, 1881. Mr. R. P. Nicholls obtained a young bird, exactly the colour of a female Kestrel on the back, from Aveton Gifford, and presented it to the Natural History Museum, South Kensington (MS. Notes).

Yellow-billed Cuckoo. *Coccyzus americanus* (Linn.).

An accidental visitor of extremely rare occurrence.

A specimen of the Yellow-billed Cuckoo was picked up dead beneath the lighthouse on Lundy Island in October 1874, and was taken to the Rev. H. G. Heaven for determination. This bird was carried from the island by a friend of the keeper of the lighthouse for preservation, and we cannot state where it is now. Mr. Heaven gave us a full description of it at the time, and we have not the slightest doubt that it was correctly identified. This Cuckoo constructs its own nest, and rears its own young, in North America.

In the first edition of Yarrell's B. Birds, vol. ii. p. 190, mention is made of a Yellow-billed Cuckoo which was killed in Cornwall, but no particulars are given. Mr. Yarrell only states "the Cornwall specimen was the subject of a private communication," and Mr. E. H. Rodd appears to have had no knowledge of it. Two specimens have been obtained in Ireland, and two in Wales. One of these Welsh birds, shot on Lord Cawdor's Stackpole estate in Pembrokeshire, was presented to the National Collection, and is still, we believe, to be seen at South Kensington. In spite of these occurrences, this American species is not admitted into the British List by Mr. Howard Saunders in his 'Manual of B. Birds.'

Note.—Another American species, the Black-billed Cuckoo (*Coccyzus erythrophthalmus*), has occurred in Ireland once.

Order STRIGES.

THE OWLS.

The Owls form an important family of birds beautifully adapted for the work they have to discharge in the economy of Nature, which is to keep in check the prolific swarms of lesser rodents, all of them feeders in the dark, most destructive to useful crops, and capable of quickly devastating a country were they to be suffered to multiply without restraint. For this work the Owls are equipped with soft plumage, their wide-webbed wing-feathers enabling them to approach their quick-eared prey with noiseless flight; they have exquisite ears for detecting the least rustle of a mouse in the herbage; they have powerful feet and strong talons for delivering the fatal pounce; and they are supplied with facial disks of feathers radiating from their large eyes, which serve to reflect every ray of light. We have always regarded the Owls as especial favourites, and have regretted every instance in which such beautiful and useful birds have been slaughtered. There are only four British Owls which are at all common and generally dispersed; and of the four, two, the Barn-Owl and Brown or Wood-Owl, are resident throughout the county; the Long-eared Owl is a winter visitor, sometimes numerous, and only occasionally known to nest in Devonshire; while the Short-eared Owl is a regular winter visitor from the North, well-known to sportsmen, who flush it commonly in turnip-fields and snipe-bogs in the autumn and winter. Besides these four British species we have, as a very rare chance visitor to the county from the far North, the splendid Snowy Owl; and one other small Owl, very numerous in the South of Europe, the Little Owl, has once or twice occurred at

large; but so many of these little Owls are brought into this country that, perhaps, all of the reported examples may properly be considered as escapes. In addition to these, there is also a single instance in which the Hawk-Owl, a singular species from the northern parts of the world, has been detected in the south of the county.

Observation.—Two other small Owls, viz. Tengmalm's Owl and the Scops Owl, occasional visitors to other parts of England, have not yet been recorded from Devon. The first has been killed once in Somerset, and the second has been obtained once on the Scilly Islands, and once on the north coast of Cornwall.

Family STRIGIDÆ.

Barn-Owl. *Strix flammea*, Linn.

Resident, generally distributed and still common, though its numbers are constantly being thinned by gamekeepers and others, notwithstanding its great utility in destroying field-mice and other rodents. Breeds.

Too often senselessly slaughtered, this valuable member of the rural police may be met with far from his native haunts, in the very last places where we are pleased to see him. In every little bird-stuffer's shop the Barn-Owl may be numbered by the half-dozen distorted and caricatured, his face and wings, perhaps, converted into fire-screens; too often we find him rotting with crows and weasels in a keeper's larder, having been murdered by the cruel pole-trap to which, having caught his mouse, he has unsuspectingly betaken himself to devour it at leisure; while the guns of those who, if they knew their own interests, "*sua si bona nôrint*," would best strive to protect him, are too often pointed at him. Feeding almost exclusively upon field-mice and rats, and destroying great numbers of these mischievous rodents, besides varying his diet occasionally with large beetles and cockchafers, the Barn-Owl renders immense benefit to the agriculturist, and, as is well known, Mr. Darwin has connected his preservation with the interests of the farmer by an ingenious and interesting chain. It has been observed that certain clovers cannot seed without the intervention of the humble-bee to introduce the pollen to the stigma*. The field-mouse is the humble-bee's most destructive enemy, devouring it and its comb by wholesale. Consequently, if the owls are all killed the field-mice multiply and, almost exterminating the humble-bees, render the clover crops a failure. This is an instance of that balance which Nature preserves between all her creatures, which man often, through ignorance, upsets to his own damage.

Mr. Barnes, gardener to Lady Rolle, at Bieton, some years ago contributed several very quaint and clever letters about birds to the 'Exeter and Plymouth Gazette.' One appeared in that paper on December 4th,

* The field-bean also requires similar assistance from bees,

1868, on the subject of the Barn-Owl, from which we quote a remarkable incident. After describing the contents of various nests which he had examined during a period of many years, finding "four varieties of mice in hoard at one and the same time in the Owl's den (*sic*)" he adds, "in the months of July and August I have seen the dark, or nearly black, house or barn mouse; the little red-backed, white-bellied, short-bodied harvest-mouse; the large, thick-coated, bull-headed, short-tailed grass-mouse; and the long, sandy, red-backed, white-bellied, long-eared, long-tailed, out-door field, or garden-mouse. Which of these four varieties of mice are the greatest rogues or enemies to mankind, it is not easy to say." After giving instances of the damage done in fields, gardens, and plantations, cucumber and melon pits, &c. by these destructive little rodents, he proceeds:—"The depredations of the Hanoverian rat are pretty well known. I never saw in an Owl's den a rat larger than about half-grown, but I have seen many from that size down to broods that have just run or started from their brood-nest. *I never once saw any kind of bird, rabbit, leveret, or other animal, besides rats, moles, and mice.* Neither did I ever see a shrew-mouse, dormouse, or sleep-mouse." He one day wished to inspect a Barn-Owl's nest "in the hollow of an immensely large ivy-clad elm-tree that stood on the lawn at no great distance from the mansion. This tree, being within sight of the mansion windows, I did not visit so often. I never can, and I believe I never shall forget, how terribly I was once taken aback, on a visit to this nest, one evening in the month of September. I was crossing the lawn when there arose a heavy thunderstorm. I ran under the leeward side of this tree for shelter. Hearing, while standing there, the young Owlets hissing and snapping their beaks, at once suggested to me to run up and have a look at them. I knew they were pretty large and strong. The entrance to their den was about eighteen or twenty feet from the ground, and the tree, as stated, was clothed with large, strong ivy. Up I clambered, and no sooner had I arrived, and was about having a peep, when, to my great surprise, I found both old birds at home, or hard by; for, in an instant, I was furiously and most desperately attacked by both. Oh! what a battering with their wings—pecks with their beaks—scratches and pinches with their claws—I did receive from those two desperate beauties! I was in no small danger of losing my eyes, or of getting battered down from the tree. I slunk down the best way I could, keeping my face as well sheltered and as near the tree as possible; unfortunately my cap was torn or battered off, and fell to the ground in the early part of the battle, and my poor head received a terrible combing, battering, scratching, and henpecking. When I arrived on the ground I was still attacked, and my cap, lying at a little distance, was not easy to get at. I made a desperate effort to pick it up. They continued to fly, dart, and bang at me. I ran with all speed to a large Portugal laurel-tree, hard by. Mine enemies were still whirling round, and watching me. I took out a knife, and cut off a branch, trimming off the side branches, and leaving the leaves on the summit. I then sallied forth, with pretty good assurance, in defence, followed by mine enemies for a considerable distance. The branch I kept whirling about, and kept them at bay, till they were tired

of my company. I assure you I was very glad to get quit of their company, and to get to some water to wash off the blood and dirt I had got in this funny, unexpected scrimmage, and I resolved in the future to be better on my guard, and more careful how I approached an Owl's den on a rainy evening, late in the season, stored with four or five strong Owlets, and both old birds at home"*.

We can remember when, in North Devon, every linhay and every cob-built barn possessed its tutelary Barn-Owl. A small hole, left in the wall just under the eaves for the purpose, admitted the Owl into the barns to pay his useful domiciliary visits, and in some corner between the wall-plate and the rafter, squeezing himself as far away as possible from the unwelcome daylight, he would sleep through the day. Here a little search would find him, in an attitude suggestive of a perpetual back-ache, dozing away until the shades of evening once more invited him forth to hunt the "small deer" on which he feeds. Sometimes the Barn-Owl issues forth early of a dim November afternoon, when he may be seen beating the hedgerows as regularly as a setter, every now and then suddenly pausing and dropping down on a mouse which has failed to detect his approach on his noiseless wings. We have kept Barn-Owls as pets, and have had them tame enough to fly and settle on our head or shoulders on our approach. One we had was very fond of fish, and would make his meal contentedly off small trout, invariably swallowed whole, tail first. The postures a Barn-Owl indulges in on the approach of strangers are very ludicrous. He will retreat backwards into the furthest corner, and there will throw himself upon his back claws upwards in a posture of defence, and with these sharp claws he is capable of inflicting an unpleasant scratch. Young Barn-Owls make a peculiar snoring and hissing noise, which often betrays the position of the nest. They also make a continual snapping with their beaks, a sound sometimes expressive of alarm, sometimes of a desire for food, and sometimes, when it came from our tame pets, we used to think, of welcome. They are rather delicate to rear from their nestling-stage of balls of whitish fluffy down, being somewhat subject to cramp. Barn-Owls, when seen on their perch in the daytime, give one the impression of being extremely thin; indeed, of the very many we have handled, we never felt one which had much flesh upon it. They sit drawn up to their full height, presenting a wedge-shaped appearance, the thick end of the wedge being formed by the head.

These Owls are subject to a considerable variation in their plumage. In a long row of these birds we were once grieved to see lying on the counter in a bird-stuffer's shop we could not find any two exactly corre-

* Mr. Barnes ascribes this attack to *Barn-Owls*, and we have, therefore, included it in our account of that species; but the whole time we were transcribing his amusing account we felt strongly convinced that it was a nest of the *Hooter*, or *Brown Owl*, he ventured to investigate, as the conduct of the old birds was exactly what might be expected from the valiant *Hooter*; and we think he confused the two birds in his mind. We have never heard of the inoffensive Barn-Owl attacking people who came near its nest.

sponding. The normal colouring of an adult male is pure white on the underparts, with a pale buff back, the buff being mottled and streaked with black. But varieties are frequently met with having dark reddish fawn-coloured backs, thickly spotted with black; while others are very pale buff, with large patches of white upon the wings, giving the birds a pied appearance. Females have the breast and flanks flecked with a few small spots of black, and varieties are sometimes met with in which all the underparts are fawn-colour. We have seen a specimen with a pure white tail, without any markings: it was killed near Exeter Jan. 22nd, 1877.

In the summer-time we have noticed that Barn-Owls are often found quartering the newly-mown hay-fields in the evening, short-tailed field-mice being then numerous there and easily seen. During the long-continued snow and frost of the severe winter of 1890-91 many Barn-Owls perished. Several attempted to come into houses for warmth and shelter in our village, but were driven out by the inhospitable people, some of whom were frightened at them, and their frozen and famished bodies were found stiff upon the snow in the courtyards. We ourselves picked up several lying dead in the fields.

The economy of the Owl's nest is well-known, how the birds lay and sit, and how, when the first Owlets are hatched, they go on laying further eggs, the warmth of the Owlets' bodies assisting in incubating them, so that an Owl's nest will be found to contain Owlets in various stages, fresh eggs, and the addled egg which we have found to be the invariable tenant of every Owl's abode.

There is probably an immigration of Barn-Owls in the autumn and winter. They appear to have been especially numerous in 1859 at Plymouth.

On September 22nd, 1871, a female Kestrel and a young Barn-Owl were brought to us; they were taken on board a vessel a few miles off the south coast, as it was coming up the English Channel. The Kestrel was seen chasing the Owl for several miles, and both alighted on the vessel for rest.

Family ASIONIDÆ.

Long-eared Owl. *Asio otus* (Linn.).

A winter visitor, being met with in the autumn and winter months of almost every year in some part of the county; but it is rarely numerous, and very seldom remains to breed. The Rev. Thos. Johns says he found this species only in the autumn and winter in the neighbourhood of the moors (Bray's 'Tamar and Tavy,' i. p. 347). Many occurred in the winter of 1873-74, and from September to December 1879 there seems to have been a very large flight in the south-western part of the county.

A pair were shot at Buckland Abbey in April 1846 (E. M., Rowe's Peramb. Dartmoor, p. 233). One occurred at Plymouth, April 7th, 1860,

and another May 31st, 1877 (B., MS. Notes; and J. G., Zool. 1877, p. 283). Mr. Boughton Kyngdon informed us that he found a nest with eggs on Haldon, May 13th, 1863.

Twenty occurred near Kingsbridge in December 1879. They were mostly from the neighbourhood of Halwell Woods, near the Estuary (R. P. N., MS. Notes). This species was extremely numerous in other parts of England about that time. In January 1886 seven or eight were seen flying out of a plantation near Kingsbridge (E. A. S. E., MS. Notes).

At Plymouth many occurred in December 1873; in October and December 1876; from September to December 1879; and in January and November 1881; but this Owl is not usually numerous there (J. G., Zool. 1874, p. 3910; 1877, pp. 44, 47; 1879, p. 43; 1880, p. 47; 1881, p. 197; 1882, p. 65). One was shot on Derriford Estate, Egg Buckland, February 1st, 1861 (T. R. A. B.). It is scarce near Exeter, but specimens were shot in that neighbourhood November 1868, December 1870, October 1873, and November 1879. At Torquay it is a rare visitor. A pair were obtained there December 17th, 1873 (A. von H., Zool. 1874, p. 3907).

It is not mentioned in the lists of birds of Lundy Island.

This pretty species of Owl is such a recluse, hiding itself in thick fir-plantations, where it chooses its roost on some branch close to the bole of the tree, and its plumage corresponds so closely in its tints with those of the bark, that it may be easily overlooked, and may be more numerous in a district than it is supposed to be. It is also strictly nocturnal, coming abroad only at dusk to feed on mice and small finches. We have seen the young perched side by side upon a branch, and so inconspicuous were they that they might easily have escaped notice. Only once were we fortunate enough to detect a Long-eared Owl's nest in North Devon, and this was close to our house. A keeper at Heanton, near Barnstaple, observing one of these Owls on a bank fired at it, and found on going forward that he had killed five; the Owls must have been squatting very close together. We have two of the five in our collection. Not many specimens of the Long-eared Owl are brought to the Barnstaple bird-stuffer, and we do not think it is at all a numerous species in the northern division of the county. It is chiefly a winter visitor to the South-western Counties, but is stated to be a resident in Dorset, Somerset, and Cornwall. This makes it all the more strange that it is not a resident in Devonshire.

Short-eared Owl. *Asio brachyotus* (Forster).

[Woodcock-Owl.]

A winter visitor of frequent occurrence and sometimes numerous. It is met with every autumn and winter in the south of the county, sometimes arriving as early as September (R. P. N., MS. Notes). It was abundant throughout Devonshire in 1875, 1876, and 1878. It has been occasionally obtained in spring. One was shot on Exmoor, March 13th, 1829 (E. M., Trans. Plym. Inst. 1830, p. 298). One occurred in May

1850 near Exeter (R. C.); some in March 1876 near Plymouth (J. G., Zool. 1876, p. 4902); and one was shown to us in the flesh by the late Rev. John Hellins that was killed at Budleigh Salterton in March 1881.

This species was unusually plentiful in the autumn of 1876 at Plymouth, where six occurred in November (J. G.); and near Kingsbridge, where twelve were flushed from one small patch of furze (H. N., Zool. 1876, p. 5180). A small flock occurred near Ilfracombe, February 3rd, 1876 (M. A. M., Zool. 1876, p. 4718). It is a winter visitor to Lundy Island (Trans. Devon. Assoc. viii. p. 308).

The Short-eared Owl is a well-known winter visitor to the South, arriving about the middle of October, and leaving again towards the end of March. It chiefly frequents moory ground, where it squats close during the day among coarse grass and rushes, and is often to be met with in considerable numbers. In the late autumn the sportsman also comes across it in turnip-fields, where the setters will draw on its scent and stand it. It is then not a little ridiculous, on going up with the expectation of a covey, to see several of these Owls rise heavily off the ground, when they will fly round one, looking like cherubims as depicted on tombstones in village churchyards, before scattering in different directions in search of another quiet roost. One day when sniping on Braunton Burrows after some heavy rains we had to splash for some distance through flooded ground, until at last we gained a sandy hillock covered with rushes, which rose like an island out of the water. Here we flushed at least twenty Short-eared Owls, which sailed solemnly round us and then settled on adjoining mounds. Sometimes the Snipe-shooter finds these Owls even more numerous than the Longbills on the bogs, and will come across Owls of all shades, apparently; some so light in colour as to appear white when they are making off, and these light-coloured birds being much more wary and difficult to approach than the dark olive ones suggest that they are cautious old cock birds, which they really are. We, however, put up one of these light birds one day on a bog and, instead of consulting his safety by flying off (not that we should ever be guilty of lifting our gun against an Owl), he swept round us close at hand uttering a curious cry, until another Owl, evidently his mate, also rose, and then the pair flew off a short distance, settling again on the bog, the lighter bird perching on the top of a withered furze bush, from which he watched us until we moved off. On Lundy Island the Short-eared Owl is considered the precursor of the Woodcock, and at a time of severe frost we found both Cocks and Owls plentiful on the island—the Owls very much in the way, as the setters would draw on them, mark them down when they were flushed, and then draw on them again and again. This species is not exclusively nocturnal, for we have flushed it off a recently killed Peewit in the middle of the day, the head of which it had, after the manner of Hawks and Owls, but just devoured as its first bite. We do not ourselves imagine that the Short-eared Owl kills many Snipe. He may devour a wounded bird which comes in his way, but his chief food consists of mice and beetles. On some extensive marshes intersected by stone walls we have seen Short-eared Owls when started from their cover on the

ground fly and perch on the top of a wall, and as one approached fly on again to the next wall, taking care to dip down and put the wall each time between the pursuer and themselves.

Colonel Montagu remarked that the short tufts on this Owl's head are only erected when the bird is in a quiescent state, and are instantly depressed when it is disturbed: whereas the longer tufts of the preceding species have been noticed by an excellent observer to be pricked up when the bird is watching for, or suspecting, an intruder on its privacy (J. F. Brockholes, Zool. 1859, p. 6752). These tufts of feathers, however, are in no way connected with the ears of these Owls, or assist their sense of sound.

We have seen a Short-eared Owl mount right up into the bright sunshine until lost to sight: and keepers of lighthouses have recorded that this species is able to bear without inconvenience the full glare of their lanterns, flying into the blaze of light in order to capture the small birds fluttering and beating against the glass, and even availing themselves of the artificial light to pursue and capture Thrushes on the wing. "Constantly one hears their dying cries," says Mr. Gätke, writing from Heligoland, "when clutched by the nude talons of an Owl that had just flitted, like a phantom, noiselessly past the light."

The Short-eared Owl appears to be scarce on Dartmoor. In ten years' Snipe-shooting over the northern and eastern portions of the Forest we never came across a single example. We are not aware that the nest of the Short-eared Owl has been obtained anywhere in the South-western Counties, although the bird might occasionally be expected to nest on some of the West-Country moors. We have known its nest to be taken on Skomer Island, off the S.W. coast of Pembrokeshire, no great distance away from North Devon.

Tawny Owl. *Syrnium aluco* (Linn.).

Resident, generally distributed in wooded districts throughout the county, but not so plentifully as formerly. Breeds.

There are two varieties: one larger, with greyish plumage (grey phase), much longer and stronger claws, and said to be much fiercer and more destructive, preying even on rabbits; the other smaller, with reddish plumage (red or erythrisal phase).

The well-known Hooter is a common frequenter of woods and plantations, living in the dark shelter of spruces and firs especially, throughout the county; and glad should we be if more mercy and protection were meted out to this very useful bird, whose benefits to the agriculturist in the destruction of rats and of the mischievous long-tailed field-mouse call for some better consideration in return. We would also bespeak the indulgence of game-preservers, whose keepers too generally in ignorance destroy this harmless Owl. As we have ourselves had both Pheasants and Brown Owls existing side by side in the same covers, and have never known any of the former to have suffered from the Owls, we can make

this appeal with all confidence. If people would only remember that Owls do not come abroad to seek their prey until dusk, by which time all young Pheasants are safely hovered under their mothers or in their coops, they would see that any accusations brought against them of carrying off young Pheasants can have no foundation. We have had Brown Owls living around our house in a semi-domesticated state, sometimes nesting side by side with Jackdaws in disused pigeon-boxes, sometimes availing themselves of old Crows' nests in the trees, and often during the day we have seen them perched asleep by the side of the chimney-pots on the roof of the house. On warm, sunny mornings they would sometimes present themselves on some bare branch, basking in the sun, and knowing their favourite roosts in the various trees we could at all times of the day find them if we wanted to show them to any visitors. We have kept them as pets, and have noticed that, like all other species of Owl we have had from time to time in our possession, they require no water, either for drinking or for bathing. One we had was very fond of roosting in our poultry-house, where we have found him with a pullet on either side. He found a mate, and the pair occupied a hollow tree in our grounds, where year after year they brought up a family of Owlets. Going out some still moonlight night, and imitating their hooting cry, we have soon had answers from the various Hooters within hearing, and have drawn them close up to us, having them perched all round on the roof of the house, and also on the stables and outbuildings and on the surrounding walls. A friend who a short time since amused himself in this manner assured us that he counted twenty-six Owls hooting back to him from the woods on either side of a beautiful valley. Any one rambling through a woodland country must have heard the chattering of Jays, the harsh scolding of Mistle-Thrushes, and the shrill notes of smaller birds engaged in mobbing and teasing a Brown Owl discovered by them on his roost. This is a joke of the woods which never grows stale. In the Great Exhibition in Hyde Park in 1851 there was a very clever case of stuffed birds illustrating this common sylvan episode, from the hands of Mr. G. Gordon, Curator of the Dover Museum, a very skilful taxidermist. Nor must we omit to mention two very beautiful specimens of bird-stuffing which were for some time deposited in the A. M. M. at Exeter, the work of Mr. W. Brodrick, entitled "Night" and "Morning." In "Night" a Brown Owl was mounted in a very lively attitude, his eyes staring forwards into the dark, his ears strained to catch the rustle of the mouse, in the very act of making his pounce; while "Morning" reveals him fast asleep in the chink of a big bole, with an inquisitive Great Spotted Woodpecker climbing up and peeping round at him. These were life-like studies; most cleverly executed, and true works of art.

Alas! how often have we been present when some Brown Owl has been disturbed from his roost in a fir-plantation by a shooting-party. Great is the excitement; beaters, keepers, and guns are all eager for his destruction; he is foolishly regarded as a dangerous poacher; and, if the chance offers, is as relentlessly potted as any prowling cat or weasel. With loud shouts of "Owl, sir! Owl, sir!" he has sometimes fortunately flown up to our gun and has passed away in safety.

Brown Owls are courageous parents, and very impatient of strangers coming near their nest when the Owlets are hatched. One of the approaches to a friend's residence was virtually closed for a time, owing to a pair of Brown Owls, whose nest was placed in a fine elm by the entrance gate. People passing through had to run the gauntlet of the Owls, who came forth to attack and buffet them, so that they were afraid to use this road. And we know of a case where a youth had taken an Owlet from the nest, and was showing it to his father in a farmyard, when one of the old Owls suddenly attacked them both, scratching the farmer severely about the face, and actually tearing out one of the eyes of his son, so that he had to enter as patient in the local infirmary.

One afternoon in the summer we watched a pair of Brown Owls making numerous pounces from the lower branches of a fine elm into the rank grass beneath; they were evidently catching insects—tipulæ, we fancied—with which they flew up into the tree, dropping again the next instant to capture others. They made two or three descents a minute, and continued this amusement some little time.

Mr. Barnes, whose adventure with the Barn-Owls we have already recorded, considered that the Tawny Owls furnished him a forecast of the weather, and wrote:—"I have for years observed that when the Owl is merry at early dawn we are pretty sure of a fine day. Also, if he is merry at early evening, we are pretty sure of a fine quiet night. While, if the Owl breaks out with '*Hoo-hoo-hoo-Too-vit*' by day, and takes a flight, stormy weather is sure to pretty soon follow. These are sure and invariable indications which I have observed for years."

Snowy Owl. *Nyctea scandiaca* (Linn.).

An accidental visitor from the extreme North, of very rare occurrence.

It can be only by an accident that this grand circumpolar Owl is ever driven to this country, especially so far south as Devonshire. The Rev. W. S. Hore had a fine specimen which was captured by St. John's Lake, Hamoaze, Plymouth, in December 1838, and brought in by a boatman to the shop of Pincombe, the Plymouth bird-stuffer, while Mr. Hore happened to be in his shop. Mr. Hore subsequently purchased the bird, and told us that at the time this Owl was met with the weather was exceptionally stormy, so much so that the Earl of Durham, on his return from Canada, was detained for three days in the Sound in consequence of the gale. This specimen is mentioned by Dr. Moore as having been shot on Mill-brooke Lake, and is probably the same as the one said to have been knocked down with a stick by a boatman on the bank of the River Tamar near St. Germans, in Cornwall, in Dec. 1838 (E. M., Rowe's *Peramb. Dartmoor*, p. 233; J. C. B., *Nat. Hist. S. Devon*, p. 200; R. A. J., '*Naturalist*,' p. 45). Dr. Conch recorded this bird as having been picked up dead near Plymouth (*Cornish Fauna*, part ii. p. 69, Appendix).

A few days before the occurrence of Mr. Hore's specimen at Plymouth, Mr. Thompson has recorded that a flock of Snowy Owls accompanied a

ship halfway across the Atlantic, from the coast of Labrador to the north of Ireland. This was in November 1838, and Mr. Hore's Snowy Owl may have reached our coasts through an assisted passage on the rigging of the ship.

A long interval had to pass before the Snowy Owl was again observed in this county, and it was not until 1876 that another could be recorded. On March 13th in that year, the weather being very cold and snowy, one appeared at Ditsworthy Rabbit-warren in S. Devon, not far from Plymouth, and was actually shot by a little boy of eight years of age, the grandson of the warrener. This little fellow had seen the Owl pounce upon and instantly kill a rabbit, and with a single-barrelled gun fired at the bird as it flew over him, and brought it down. It was sent into Plymouth for preservation, where Mr. Gatecombe examined it, and judged it to be a male, and, from its very white colour, an old bird. "From its comparatively small size, and the general whiteness of its plumage, I feel certain of its being a male, and an old bird too." Mr. Gatecombe adds that when the Owl was first seen it was being chased by some Hawks (J. G., Zool. 1876, p. 4921; 1877, p. 163).

About ten days later another Snowy Owl was trapped on Exmoor, probably the companion bird. A shepherd had observed it in a very short time strike at and kill two hares, and ran off to inform Sir F. W. Knight's keeper that a large bird was making short work with the game in the forest; and in the afternoon of the same day this fine Owl was trapped in a gin baited with part of one of the hares it had previously killed. (The Swedish name of the Snowy Owl is *Harfang*, the *Hare-catcher*.) We went to Barnstaple on purpose to see it, as it was sent to the bird-stuffer in that town for preservation. It was a very large female, and of about the same age, judging from the amount of dark bars across the plumage, as the one obtained at Plymouth. It was very well set up by Frayne, and was seen and admired by many persons, before it was sent to Exmoor, where we believe it may still be seen in Sir F. W. Knight's house. (M. A. M., Zool. 1876, p. 4900.)

The report of Snowy Owls having been seen on Dartmoor in the spring of 1876, which appeared in the 'Western Times' of April 3rd, 1876, no doubt refers to the one killed at Ditsworthy, and to its companion, shortly afterwards trapped on Exmoor. If more than two were seen, it is some comfort to believe that not all these splendid birds met with slaughter, and that there were some that escaped.

The Snowy Owl hunts for its prey in the daytime, belonging to the diurnal Owls, and is one of the chief ornaments of the Polar avifauna. It becomes very docile in confinement. Some few years since, Mr. Swaysland, the well-known Brighton bird-stuffer, had a collection of live Owls which was exhibited in a small gallery underneath the seaward end of the West Pier, which we often visited, and used to stroke the breast of a fine Snowy Owl, which always appeared gratified with the attention. The fate of these Owls was a sad one, as they were all swept out to sea and drowned by a terrific gale which almost wrecked the West Pier.

There is a specimen of the Snowy Owl in the A. M. M. from the col-

lection of the late Mr. F. W. L. Ross, which he stated to have been taken at Exmouth. It appears to have been kept in captivity for some time, as the tail-feathers are soiled and worn; but this may have been done subsequently to its capture. The date of its occurrence was not recorded, but it must have been previous to 1851, as we first saw the specimen in Mr. Ross's possession in that year.

A tarso-metatarsal bone of this Owl was obtained from Kent's Cavern, Torquay, and is preserved in the British Museum (Lydekker, *Ibis*, 1891, p. 385).

Hawk-Owl. *Surnia funerea* (Linn.).

Capt. J. N. Still, of Slades, Knoyle, Wilts, wrote to inform us that he had followed and watched for some time a Hawk-Owl as it was circling round and round in the air, making a noise like the cry of a Hawk in the middle of the day, near Musbury, in E. Devon. In his letter, dated Sept. 27, 1876, he says: "I have great pleasure in forwarding to you the following account of the Hawk-Owl. It was seen by my father and self near Musbury, either the very end of August or the beginning of September, 1869, about three o'clock in the afternoon. We were first attracted to it by its Hawk-like cries. It kept circling round and round about forty yards high, and frequently came close to us. We watched it for half an hour or so, when it gradually kept circling away towards the west. The day was a fine hot summer one. I had no gun with me when we saw it, and although I searched for it on the following days I never found it. I daresay some gamekeeper killed it, little knowing what bird it was. My father and I have frequently since talked about the bird, hence the reason for my knowing the date."

The first-recorded British specimen of the Hawk-Owl was captured alive on board a collier at no great distance from the Cornish coast in March 1830, and was taken to Waterford, where it lived for a few weeks, and then passed into the hands of Dr. Birkett of that town, who subsequently presented it to the Museum of Trinity College, Dublin. A second occurrence of this Owl in the West of England is reported by Mr. E. T. Higgins in the 'Zoologist' for 1851 (p. 3029) as having taken place on Backwell Hill*, in Somerset, near the Yatton Station of the Bristol and Exeter Railway. This bird was shot while it was flying about in the bright sunshine at two o'clock in the afternoon of August 25th, 1847. It afterwards passed into the collection of Mr. Borrer, the author of the 'Birds of Sussex.'

The Hawk-Owl, as its name implies, partly resembles a Hawk and partly an Owl. In its seeking its prey by day, in its long tail, and in its cry, it approximates to the Hawks, while its facial disks (considerably modified, however), its nest in a hollow tree containing white eggs, and its feeding

* This district in Somerset has been peculiarly rich in rare birds. At no great distance from the spot where the Hawk-Owl was procured, examples of Tengmalm's Owl and of White's Thrush have been met with.

chiefly on mice, proclaim its close relationship to the Owls. Hawk-Owls inhabit the northern parts both of Europe and America. The American form, which is darker in its plumage, has been distinguished by some ornithologists from the European Hawk-Owl. Most of the examples that have been obtained in England belong to this darker race, but an undoubted specimen of the lighter North-European bird was shot at Amesbury, in Wilts. As the bird seen by Captain Still was not obtained, we cannot say to which race it belonged.

[Eagle Owl. *Bubo ignavus*, Forst.]

The only authority for the occurrence of this species in this county is Dr. Edward Moore, who says "I have seen one specimen near Honiton in 1820" (Trans. Plym. Inst. 1830, p. 298); and "I have only seen one specimen in Devonshire, and that in a living state near Honiton in 1820" (Mag. Nat. Hist. 1837). These are but meagre particulars, as we are not informed whether the bird had been captured in a wild state; or if there were any reasons to conclude that it had not escaped from an aviary. It is only with the greatest diffidence that we mention this fine bird in our book at all.

In the MS. Notes of birds sent to him for preservation, Mr. Bolitho of Plymouth records, under date May 10th, 1860, a "Great-eared Owl received from Wm. Chichester, Esq., Grenofen, Tavistock, which weighed $4\frac{3}{4}$ lbs. Extent of wing 5 ft. 11 inches." Mr. J. Gatecombe informed us that this specimen was understood at the time to have died in captivity. It was purchased at Bolitho's sale by the late Mr. Marsh-Dunn, and we saw it in 1883 in his fine collection at Teignmouth.

Eagle-Owls have attained to a great age in aviaries in this country; Lord Lilford possessed one which was considered to be at least seventy years old.

Why this fine Owl, the *Bubo grande* of Spain, should have been so grossly slandered by Mr. T. Forster in his 'Synoptical Catalogue of British Birds,' 1817, as to have "*ignavus*" bestowed upon it as its specific name, we are at a loss to imagine, and would prefer to see *Bubo maximus* adopted, a name which was given to it by Fleming in his 'British Animals,' 1828, and has been used by most writers on British Ornithology. Lord Lilford, who had many opportunities of observing it in Spain, Corfu, &c., speaks highly of it as a courageous and noble bird, and Mr. Dresser calls it "one of the boldest of the European birds of prey," and adds, "no game-bird, not even the Capercaille, is too large for him."]

Little Owl. *Athene noctua* (Scopoli).

An accidental visitor of very rare and somewhat doubtful occurrence in a really wild condition, being often imported and kept in captivity.

A specimen is mentioned in the Supplement to Montagu's 'Ornithological Dictionary,' on the authority of Mr. Comyns, as having been *seen and*

shot at in North Devon in 1808. Dr. Edward Moore says a specimen procured at Plymouth was sent to Mr. Drew for preservation, and that "another was shot by Mr. Comyns a few years since near Dawlish" (Trans. Plym. Inst. 1830, p. 299). There is, perhaps, some error in the latter statement, and probably the specimen alluded to was the same as that mentioned by Col. Montagu. One occurred near Ashburton in 1809 (A. G. C. T.). Bellamy says it has been shot not far from Yealmpton (Nat. Hist. S. Devon, p. 200). One was sent from Downes, near Crediton, the seat of the Bullers, in October 1851, to James Truscott (the Exeter bird-stuffer) for preservation (R. C.). A specimen in the Torquay Museum was taken at Pilsmore, Torquay, about September 1890 (W. E.). These two last specimens were most probably imported birds.

The Little Owl, the emblematic bird of ancient Athens, sacred to Pallas Athene, is almost annually brought over to this country and kept in aviaries as an amusing pet, so that no confidence can be put in any of the reported occurrences of it in a wild state. These we consider to have been all escapes. Some of the so-called Little Owls were probably examples of the North-European Tengmalm's Owl. One shot at large in the year 1859, at Winscombe, in Somerset—the locality which also produced an example of the Hawk-Owl, which was in the possession of Mr. C. Edwards, of the Grove, Wrington, who showed it to us—was certainly *Nyctala tengmalmi*. Some tame Little Owls in our possession are extremely fond of cockroaches. Whenever a stranger approaches them their contortions are most amusing. They bow repeatedly, jerking their bodies up and down in a telescopic fashion—all symptoms of nervous alarm, as they never perform any of these antics when we go near them to feed them. Our late friend, Mr. W. Brodrick, kept some in a roomy chamber built for them in an old wall at his house, Little Hill, Chudleigh; they seemed quite at home in their comfortable quarters, and were in beautiful plumage.

Little Owls have been imported into this country, and turned loose, in some numbers. Certain of these birds, in a case well known to us, survived the winter; and there were three or four instances in which they not only nested, but successfully reared their young in the following summer in what was, virtually, a wild state.

[*Observation.*—We avail ourselves of a vacant space on this page of our book to allude to two examples of the Egyptian Vulture, *Neophron percnopterus* (Linn.), which were seen near Kilve, in Somersetshire, on the shores of Bridgwater Bay, in October 1825. One of them was shot and proved to be in immature plumage. It had gorged itself by feeding on the carcass of a dead sheep. Only one other example of this species has occurred in the British Islands, and that was killed on September 28th, 1860, at Peldon in Essex. This Vulture, in the adult plumage, is white with black primaries; the fore part of the head and neck yellow and bare of feathers, whilst the immature birds are dark brown with greyish head and neck. It is generally seen in pairs, and inhabits the South of Europe, Madeira and other Atlantic Islands, and North Africa, in winter occasionally visiting the Cape Colony, where we ourselves have seen it, and where it is known as the 'Witte Kraai,' or White Crow. It is also found in Asia Minor and Persia, and has reached as far north as Norway. The Griffon Vulture, *Gyps fulvus*, Gm., has been obtained once in Ireland.]

Order ACCIPITRES.

Family **FALCONIDÆ.**

THE HARRIERS.

The Harriers and the Buzzards form a connecting-link between the Owls and the true Falcons. The Harriers are birds of slender bodies, long legs, tails, and wings, possessing a buoyant, Gull-like flight, generally low over the surface of the ground. Their possession of facial disks would indicate that they are partly crepuscular, and that they prey to some extent upon the small rodents which come forth to feed at dusk. But they are bold and powerful birds, and the Marsh-Harrier, in particular, flies at larger game. It would be necessary to go back quite to the beginning of the present century to find a time when the three British species of Harrier were at all numerous in Devonshire. Our book is unfortunately, in several instances, only the obituary of interesting species, among which must be included the Harriers—one of them, the Marsh-Harrier, quite exterminated as a resident in the county, while the other two, the Hen-Harrier and the pretty Montagu's Harrier, are fast becoming so and are to-day very rarely seen. In the time of Col. Montagu the fine Marsh-Harrier was common on most of the estuaries on the look-out for wild-fowl, while its visits to rabbit-warrens were dreaded by the warreners.

The Hen-Harrier then nested among the furze on almost every moor and common, where it was sometimes joined by the slighter species, now known to be only a summer migrant, and first discriminated by Col. Montagu, and gaining from that circumstance its specific name. The Harriers are

easily trapped, and their nests, placed upon the ground, are not difficult to detect, and when discovered are generally destroyed. Foolish birds, often blundering up to the gun, it was not likely they would long survive the new condition of things brought in by percussion-guns, breech-loaders, and stringent game-preserving. But for a long time after persecution had banished them from all the central and southern districts of the county, the wild hill-region bordering on Exmoor, as well as the great Forest itself, continued to afford a fastness to two of the species, from whence, as from a reservoir, they were poured forth in the autumn and winter to hunt over the salt-marshes and Snipe-grounds of the lower coast-districts of Devon. Mr. James Turner, of Staplegrove, Taunton, who was for some time Secretary to the Devon and Somerset Stag-hounds, and was continually riding over the Forest, informed us (in October 1876) that not a day passed when he was on the moor without his seeing a Harrier or two, and that, to his knowledge, the shepherds made a practice of destroying every nest they found. He told us that he believed he had identified Montagu's Harrier, as well as the Hen-Harrier, on the Forest. We have ourselves, while fishing on the Barle in the summer time, seen a pair of that species some short distance above Lanacre Bridge; and it may still be expected to be met with nesting occasionally within the limits of the county.

Marsh-Harrier. *Circus aeruginosus* (Linn.).

[Moor-Buzzard.]

A casual visitor, of very rare occurrence.

Marsh-Harriers were not uncommon about the rabbit-warrens on Dartmoor up to 1844, and committed great depredations among the young rabbits (E. M., Trans. Plym. Inst. 1830, p. 297). Indeed, they seem to have been formerly more abundant than any of the other large Hawks (J. C. B., Nat. Hist. S. Devon, 1839, p. 199). About August, Marsh-Harriers were

frequently found hawking over cultivated lands and near farm-houses (T. J., Bray's 'Tamar and Tavy,' 1st ed. 1836, i. p. 345). This species is marked as breeding on Dartmoor (E. M., Rowe's Peramb. Dartmoor, 1st ed. 1848, p. 229). About 1843, during a severe winter, many specimens were obtained (J. B. R., Trans. Plym. Inst. 1863). The Rev. R. A. Julian stated that, while Snipe-shooting on Dartmoor, in December 1849, he saw two of these birds, and a warrener then informed him that many years ago, in a very severe winter, he destroyed eight of them in one week ('Naturalist,' 1851, p. 58). A male in the second year's plumage was shot by a keeper at Slapton Ley, November 1st, 1875, whilst in the act of taking a Coot (R. P. N., Zool. 1876, p. 4761). This specimen is in the possession of Sir Lydstone Newman, Bart.

The Marsh-Harrier is said to be an occasional visitor to Lundy Island (Trans. Devon. Assoc. viii. p. 309). An adult male was killed on Braunton Marshes, November 3rd, 1890 (H. A. Evans, Zool. 1891, p. 62), and is now in the Museum of Westward Ho! College.

The Marsh-Harrier, once very common, is now by far the scarcest of the three British Harriers in Devonshire. On Dartmoor, where it formerly nested, we never encountered a single example in the course of many years' Snipe-shooting. One frequented the Barnstaple river about 1857, and on a hot August afternoon, we believe in that year, we saw it fishing in some shallow pools left by the tide on the wide flat opposite Heanton Court. It plunged rather awkwardly into the water several times, but the distance was too great for us to see if it captured any fish. This bird, which was a fine adult male, frequented the sides of the river for a considerable time, and we do not think was shot. So rare is this Harrier in North Devon, that we cannot remember a single example being brought to the Barnstaple bird-stuffer during a long period of years. Capt. Still, of the Royal Wilts Militia, writing to us on September 27, 1876, says:—"We have a pair of Marsh-Harriers in the valley near Musbury at the present time; they have been there since last winter, and are supposed to have bred. They seem to lead the wild Ducks a nice dance. They never leave one particular spot, a belt of white poplars close to the river, except when in search of food."

The Marsh-Harrier is now equally as rare in Cornwall and Somerset as in Devon, but in Dorset it still frequents the salt-marshes between Wareham and Arne (Mansel-Pleydell, 'Birds of Dorset').

Besides feeding on small mammals and birds, the Marsh-Harrier is, as Lord Lilford informs us, a terrible stealer and devourer of eggs.

Hen-Harrier. *Circus cyaneus* (Linn.).

[Blue Hawk, Furze-Kite, Vuzz Kitt : *Dev.*]

Still perhaps a resident; but now for the most part only a casual visitor, principally in autumn, and of rare occurrence. Adult males are very seldom met with.

The Furze-Kite, or Blue Furze-Hawk, as it is called in the West, used

to be a common species on wild rough moorlands in many parts of the county. It is now so reduced in numbers as to be only occasionally seen, although we think it still nests on Exmoor and in some of the wilder parts of North Devon. We have frequently met the Hen-Harrier on Dartmoor; and in North Devon it used not to be uncommon on the Braunton Burrows and about the Barnstaple river, but young birds of the year were more often seen than adults. In the severe winter of 1860-61, an old male Hen-Harrier, on Lundy Island, appeared to be supporting himself entirely on the starving Fieldfares. We possess specimens of this Harrier in all plumages obtained in North Devon. The old male, with his blue back and pure white underparts, is a handsome bird, and it is a pretty sight to see him quartering the ground, like a setter, on the search for his food, which consists of mice, moles, lizards, and small birds. The Hen-Harrier is not a powerful bird on wing. One day, as we got over a fence, we came upon one squatting on the ground immediately beneath; it was very windy, and the Harrier went off with the wind, rolling and tossing about in the air in the most uncouth style. On another occasion we saw a Peregrine, in wantonness, fly at an old male Hen-Harrier, and were then astonished to see the Harrier make a very good flight indeed, avoiding several stoops of his antagonist and eventually shaking him off. The female Hen-Harrier, as is the case with many raptorial birds, is larger than the male and is of a brown plumage. One of the many ornithological problems solved by Col. Montagu was the true relation of the so-called "Ring-tail" to the Hen-Harrier. By rearing a brood from the nest, and observing the changes in plumage, the Colonel satisfactorily proved that the Ring-tail, which was regarded by many of the naturalists of his day as a distinct species, was only the female bird.

The Hen-Harrier formerly bred in the neighbourhood of Dartmoor. A nest containing three young birds and an addled egg was found by a servant of the Rev. Kerr Vaughan, at the end of June 1805. Two of the young being reared enabled Montagu to confirm the specific identity of the Ring-tail and Hen-Harrier (Trans. Linn. Soc. ix. p. 182; and Orn. Dict., Suppl.). The nest and eggs are said to have been found near Bovey Tracey (W. W. B. *v.v.*).

The Hen-Harrier is very scarce near Plymouth. Bolitho received only three specimens in twenty years, viz.:—a female April 1851; a male June 1851 (probably the same as the one shot at Ashburton in that month and year); and one November 6th, 1855 (MS. Notes). A female was killed there September 20th, 1873 (J. G., Zool. 1873, p. 3785; see also Zool. 1874, p. 3912, for correction of previous note).

An adult male was seen near Kings-bridge, September 27th, 1877, and another there September 11th, 1878 (E. A. S. E., MS. Notes). "A mature male bird was some years ago shot on Kernborough Moor, Stokenham, by Mr. Perrot. It passed into the collection of Mr. Roe, of Gnaton Hall. I have also met with one female" (H. X., MS. Notes).

An adult male was killed at Ashburton, June 12th, 1851 (R. A. J., 'Naturalist,' 1851, p. 269). A female was trapped at Haccombe, May 5th, 1871 (J. H. G., Zool. 1871, p. 2679). A pair were shot at Chagford, in 1871 (Pidsley's B. of Devonshire, p. 71). A young bird was shot near Taw Head, Dartmoor, Oct. 10, 1877, by Mr. E. G. Langley. A female occurred at Torquay in 1851 (E. B., Zool. 1851, p. 3234), and another, which was obtained at Dawlish the same year, is in the Torquay Museum.

There are several specimens of this bird in the A. M. M. killed near Exeter. A nearly adult male was shot on the coast near Exmouth in September 1841 (F. W. L. R., MS.



J. G. Keulemans del. et lit.

Mirrern Bros Chromo lith.

MONTAGU'S HARRIER.
Circus cineraceus Mont.
Adult Male and Black Variety.
Published by R. H. Porter

Journ. iii. p. 18). A young female was killed near Exeter in December 1875, and one on Black Hill near Exmouth in January 1888.

An adult male occurred at Barnstaple in April 1866. Another was seen on Braunton Marshes in November 1874, pursued by a Peregrine; and another male was obtained there, January 7th, 1875; two other specimens occurred there, November 15th, 1875 (M. A. M., Zool. 1875, p. 4297; 1876, p. 4759). One was obtained at Heanton, near Barnstaple, in December 1889 (J. G. H., Zool. 1890, p. 108).

We are informed by Lord Lilford that he saw an adult female Hen-Harrier nailed up to a "keeper's tree" at Tetcott, in North Devon, in November 1869, which had been killed some ten days before. He also, at various times, saw several birds of this species, one an old male, on wing in the same neighbourhood, always in November or December.

Dr. Edward Moore says:—"Mr. Drew has a specimen which appears to be a variety of the male; it is similar in size and shape; but the whole of the plumage is of the 'pitch or brownish black' of Syme's nomenclature of colour. The bird was shot by a gamekeeper of G. Leach, Esq., who declared that the female which he afterwards killed on the nest with two young ones was of the same colour" (Mag. Nat. Hist. 1837). Perhaps these birds belonged to the melanic race of the next species.

Montagu's Harrier. *Circus cineraceus* (Mont.).

[The Ash-coloured Falcon of Montagu.]

A casual visitor, occurring not unfrequently, especially on the southwestern part of Dartmoor and in its neighbourhood. It is usually seen in spring and summer, and has been known to breed on several occasions. It does not appear to have been met with in this county later in the year than October.

This is, without doubt, the commonest of the three species of Harrier in the West Country, and is more numerous the nearer one approaches the Land's End district. Mr. Rodd called it "a common species in Cornwall," and Mr. Cecil Smith considered it to be more common in Somerset than the Hen-Harrier. It was not rare in North Devon from 1856-60, the period when we were constantly on the Barnstaple river on the look-out for wildfowl. In September we have seen four or five in one day in the salt-marshes adjoining the Taw, and many immature specimens in the red plumage were at times brought to the Barnstaple bird-stuffer.

We one day came across the dead body of a male in a keeper's trap in a small cover near Barnstaple. The poor bird was drenched with rain, and had so beaten its feathers in its efforts to escape, that it was beyond making into a skin. We have seen a pair of this Harrier on Exmoor in May. Mr. M. F. Bisset, who was for so long a time the popular master of the Devon and Somerset Stag-hounds, had a nest of this Harrier with the young and two old birds preserved at Bagborough House. They had been taken by his keeper at Pixton Park, Dulverton, when he resided there. A nest with young was taken on the Blackdown Hills, near Taunton, and the young birds were presented to the Zoological Gardens in London, where, however, they received scant honour, for a gentleman who was interested in their welfare, on visiting the Gardens a month or two after they had been received, found the last survivor minus a tail in a Blackbird's cage in a remote part of the grounds, where only rubbish was

kept. One would have supposed that indigenous specimens of a very interesting bird deserved better treatment. In the Natural History Museum at South Kensington there is a nest and a pair of old birds of this Harrier from Dorsetshire, and Mr. Mansel-Pleydell has recorded a nest which was discovered in a clover-field at Winterbourne Kingston, on 24th June, 1887, in which were four eggs, of a bluish-white colour, with a few indistinct red spots and streaks ('Zoologist,' 1887, p. 465).

An old keeper, with whom we formerly shot Snipe at Shapwick, on the Mid-Somerset turf-moors, in describing to us the different birds he came across in his early days, made us feel certain that Montagu's Harrier used to occur, and probably nested, in that strange district.

Although presenting a superficial resemblance to the preceding species, this Harrier is somewhat smaller, and may at once be known by its longer wings, reaching, when closed, almost to the extremity of the tail; whereas in the Hen-Harrier the wings do not extend within some two inches of the end of the tail when folded. The flight of Montagu's Harrier is in consequence more buoyant, so much so that it almost resembles a large Tern when on wing. The adult male may also be readily distinguished by the pretty chestnut bar which extends across the underside of the wings, which in the Hen-Harrier are pure white beneath.

Black varieties of the various Harriers are sometimes met with. There is one of this Harrier in the Exeter Museum from Lyme Regis, in Dorsetshire. Mr. Elliot, of Tresillian, Kingsbridge, had another in his fine collection of birds which was shot by a farmer in his neighbourhood. This black example furnishes an instance of the narrow escapes often sustained by valuable specimens of rare birds. Mr. Edmund Elliot has informed us that after it was shot (in September 1846) it was thrown away, and some time after the farmer, coming into Kingsbridge, told Mr. Nicholls, the bird-preserved, that he had shot a "black Hawk." On surprise being expressed at his account of the bird, and a reward being offered for its discovery, it was searched for, but it was not until a fortnight later it was picked up among the cliffs near Prawle Point and brought in, when it was with great difficulty preserved and made into a presentable specimen.

Montagu's Harrier feeds on moles, mice, lizards, slow-worms, insects, birds' eggs, &c. A viper appears to be a favourite dainty, for Mr. E. H. Rodd has related that, when every other bait failed, a trap on which was placed a viper proved fatal to one of these harmless and interesting birds.

A few years since we were informed by Mr. H. Nicholls, of Kingsbridge, that Montagu's Harrier nested annually on the coast between Bolt Head and Bolt Tail. In June 1876 he had occasion to visit the downs between those two headlands in search of a scarce and local blue butterfly (*Lycæna arion*), and twice observed a pair of Montagu's Harrier quartering the ground, and since then a female has been shot at this very locality.

Montagu discriminated this species in 1802, from a male killed in winter in Wiltshire, and named it the Ash-coloured Falcon (Trans. Linn. Soc. ix. p. 188), and in the following year he examined a specimen recently

shot near Kingsbridge on the 10th August. This Harrier was first found breeding in 1808 by the gamekeeper of Mr. Templer, of Stover, who shot both sexes from the nest, and took three young ones at the same time. A nest was also found in a furze-brake by Dr. Tucker, of Ashburton, in July 1808, which contained three young ones and an addled egg. In the following year that gentleman found another nest amongst furze on a hill near Ashburton, and two young ones were taken from it, and the female shot. On the 23rd May, 1808, Montagu himself saw a pair in South Devon (Orn. Dict., Suppl.). A pair are supposed to have bred in 1868 near Barnstaple, and several of the young and the old birds were shot (G. F. M., Zool. 1868, p. 1460).

Mr. Gatcombe says that the young are not unfrequently seen on the moors near Plymouth, but that adults are rare. An adult male killed at Trowlesworthy, Dartmoor, on April 13, 1872, had fourteen lizards of two species in its crop (Zool. 1872, pp. 3100, 3273). An adult female shot at Kingsbridge, 14th May, 1847, had one entire egg of the Sky-Lark, and shells of other small birds' eggs in its stomach (H. N., Zool. 1847, p. 1806). Montagu's Harrier has frequently occurred on the coast between the Bolt Head and Bolt Tail, and probably still breeds on the Downs there (H. N.). A pair were trapped at Brushworthy Rabbit-warren, Dartmoor, in October 1839 (R. A. J., 'Naturalist,' 1851, p. 58); one was obtained at Plymouth, May 24th, 1861 (J. B. R., Trans. Plym. Inst. 1862-63). An adult male was trapped at Killerton, near Exeter, in May 1866. One occurred at Netherton Hall, near Honiton, in June 1866 (J. B. R., MS. Notes). Two were shot on Bovey Heath, in the summer of 1866 (E. P., Trans. Devon. Assoc. viii. p. 260); they are in the possession of Mr. Hole at Bovey, and the male is melanistic. A pair trapped at North Tawton, at end of July 1867, were seen by us in the flesh. An adult male, shot at Christow, in May 1870, is in the A. M. M. A female was obtained at Plymouth, May 1871, and an adult male at Trowlesworthy, Dartmoor, April 13, 1872 (J. G., Zool. 1871, p. 2638; 1872, p. 3100). Another female at Kingsbridge, 1876 (H. M., Zool. 1876, p. 5179). An adult male, in Mr. Henry Nicholls's collection, was shot on Horsewell Ley, Thurlestone. A female was trapped at Stoke Wood, near Exeter (R. C.). Two males occurred at Chudleigh in the autumn of 1879 (W. B.). A fine male, in full adult plumage, in the Museum of Westward Ho! College, was shot near Barnstaple, as recently as the summer of 1891. Montagu's Harrier occasionally visits Lundy Island (Trans. Devon. Assoc. viii. p. 389).

The black variety of this species has occurred several times in Devon. A black male was shot on the cliffs at Prawle Point in September 1846. It passed into the collection of the late Mr J. Elliot, of Tresillian House, Kingsbridge (H. N., 'Zoologist,' 1847, p. 1807, and MS. Notes). An adult pair of this melanic race were obtained in North Devon early in May 1870 (J. H. G., Zool. 1870, p. 2260); and the late Mr. W. Brodrick informed us that two specimens obtained at Lustleigh are in the possession of an inn-keeper there. A specimen supposed to be a female, and said to have been killed with several others of the same variety near Lyme Regis, is in the A. M. M.

On account of its close connection with Col. Montagu, we have chosen this Harrier as the subject of one of our Plates, and have given an illustration of an Adult Male and also of the Melanic Variety.

Buzzard. *Buteo vulgaris*, Leach.

[Kit, Kitt, Keet, Kite, Black Kite (*N. D.*), Eagle: *Dev.*]

Resident, and not uncommon about the cliffs of the sea-coast, in wild uncultivated localities, and in wooded districts throughout the county. It is, however, most plentiful in autumn and spring, when there is an

immigration from other countries, small parties of from three to five being often seen in the neighbourhood of Dartmoor and Exmoor.

Although in constantly diminishing numbers, this fine bird still maintains a residence in the county, being still frequently met with on the north coast and on the skirts of Exmoor. Mr. James Turner informed us that, in his staghunting days, he used to see numbers of Common Buzzards in the Forest, where it was, with the exception of the Kestrel, the commonest of all the Hawks. One day in September 1876, he saw four perched together in an oak tree in Horner Wood, near Porlock. Common Buzzards used to be plentiful in the neighbourhood of Lynton, where we have seen five or six in the air at one time in the Valley of Rocks, and have found a nest in the Castle Rock. Trapping has greatly reduced their numbers since then; many have found their way to the Barnstaple bird-stuffer, who, in some seasons, must have had to deal with at least a score of specimens. Recently, at Ilfracombe, in the bird-stuffer's shop, we saw several Buzzards mounted as screens, and were told that they were still pretty common and could be procured when wanted. The Braunton Burrows have witnessed the destruction of numerous Buzzards, or "Black Kites," as the warrener and his men used to call them. Coming to the warren after the young rabbits, the birds were easily trapped. We used to see a few Buzzards on the skirts of Dartmoor, and twenty years ago there was a nest annually in the wooded defile of the Teign, near Fingle Bridge, and another in the romantic glen of the North Teign, in Gidleigh Park, a little to the west of Chagford.

As a rule, the Buzzard is rarely seen in cultivated parts of the country, being a lover of wild moors, the cliffs, and woodlands. There is no bird which varies more in its plumage, and we have seen them in all stages of from pure albino to almost black. A very beautiful example, almost perfectly white all over, was one summer sent in from the neighbourhood of Lynton alive, and very slightly injured, having been caught in a trap by one of its toes. We made a good offer for it, wishing to have it as a pet—the Common Buzzard is extremely docile in confinement—but, alas! its doom was "to be killed and stuffed," and a few weeks later we saw it mounted, and a sad caricature of its former graceful self. Mr. W. Brodrick had a large collection of varieties—some ginger, some pied, brown and white, and one a remarkably dark one, almost black. Buzzards are fond of soaring in large circles at a great elevation, and, when migrating in flocks, do so at so great a height that they can only be known by their cries as they pass over. Col. Montagu thought that the soaring of the Buzzard was restricted to the nesting-season; at other times it is sluggish on wing, and rarely takes a long flight.

"The Common Buzzard," writes Mr. J. Turner, "next to the Kestrel, which is very common, is really the Hawk oftener seen than any other on Exmoor. It seems to be about always in couples, and, go to what part of the moor you like, a pair can always be seen, though the woody sides of the Barle Valley seem to afford them the most suitable locality. The Horner coverts have a pair or two. I saw two pairs sitting in one oak tree in

that fine old covert whilst riding quietly through this autumn" (*in litt.* Oct. 16, 1876).

The Buzzard preys chiefly on young hares and rabbits and feathered game; also on carrion, worms, and beetles, and Mr. Cecil Smith found a quantity of earwigs in the stomach of one which he dissected. An egg of the Common Buzzard was once presented to us by a Raven. As we turned the corner of a cliff, we came close upon a Raven with an egg in its beak, which it left as it made off, and which we found to be a fresh-laid Buzzard's egg.

The Buzzard breeds on precipices of the sea-cliffs and on trees in woods; on the sea-cliffs near Plymouth (R. A. J., 'Naturalist,' 1853, p. 118); also on the Bolt Head (R. P. N.). There was a nest at Dartmouth in 1857; and the bird has also bred in Halwell Wood, near Kingsbridge (E. A. S. E.). A pair were killed close to their nest near Plymouth in May 1874; and a pair are said to nest in the woods of Kelly, on the banks of the Tamar (J. G., Zool. 1874, p. 4227; 1878, p. 433). A pair bred at Lustleigh in 1871 (J. H. G., Zool. 1871, p. 2764). There was also a nest at Stackhole Bay, near Bolt Head, in May 1881; but a keeper shot the male, and destroyed the nest and three young (E. A. S. E.). The Common Buzzard breeds occasionally on Lundy Island (Trans. Devon. Assoc. viii. p. 309).

Lord Lilford informs us that he assisted, with the late Rev. Courtenay Bulteel, at the taking of a young bird and an egg of the Common Buzzard from a cliff on the coast near Wembury in 1855. He frequently saw single birds, or pairs, near Ilfracombe in 1861, and in the neighbourhood of Dartmouth in 1873, 1876, 1880, 1881, 1882, and 1883.

Rough-legged Buzzard. *Archibuteo lagopus* (Gmel.).

A casual visitor during the winter months, of rare occurrence.

The Rough-legged Buzzard is only a winter visitor at very uncertain intervals to the S.W. counties, but a sufficient number of instances have occurred to remove it from the category of our greatest rarities. Indeed, whenever an unusually large migration of this bird visits the north-eastern and eastern coasts of the island, a few out of the number contrive to wander on across the breadth of the kingdom; and this is found to be the case with respect to other migrants which are usually confined to the Eastern Counties. When but a few examples are obtained in these last, the West will not be favoured with a single visitant; but should it be a great season in Norfolk for Rough-legged Buzzards, Waxwings, &c., then the eyes of West-Country ornithologists are gladdened by the sight of one or two stragglers of these seldom-seen rarities. When he resided at Ilfracombe, Mr. W. Brodrick received a Rough-legged Buzzard which had been trapped on the Braunton Burrows. This was in December 1855. He kept the bird alive until the following June, when he set it at liberty. Shortly afterwards he heard from a friend in South Wales that a Rough-legged Buzzard had been shot in his neighbourhood, which was probably

this very bird. In the winter of 1875 quite a flight of Rough-legged Buzzards visited this county, and two were obtained on the skirts of Exmoor. About Christmas in that year a very dark example was trapped in North Devon, which is in our possession. At first we regarded it as an example of the North-American subspecies, *Archibuteo sancti-johannis*, which is often obtained in an almost black plumage; but the late Mr. J. H. Gurney, who examined the bird, informed us that it was a remarkably fine melanism of the European *Archibuteo lagopus*, and was much interested in it, subsequently describing it in the 'Ibis' (see 'Ibis' for 1876, p. 374). According to this excellent authority, melanistic varieties of the Rough-legged Buzzard are extremely rare, and, this being the case, we have selected this bird for illustration, especially as Mr. Gurney wrote to us, "Your Buzzard is a splendid specimen, and I believe very nearly, if not quite, unique." As in other dark examples of the Buzzard, the almost black feathers are "strongly tinged with purplish reflections," to quote from Mr. J. H. Gurney's description.

Rough-legged Buzzards were again numerous in England in the winter of 1876-77, and two were recorded from Devonshire, one in the north, and the other in the south of the county. Lord Lilford believes that the abundance or scarcity of the Rough-legged Buzzard in the West of Europe depends entirely upon the Lemmings. This present year (1891) has been a great season for these little animals in Scandinavia, and during the autumn Lord Lilford received two live Rough-legged Buzzards from Holland; another was offered to him, which had been caught alive in his own county (Northants), and he had heard of the occurrence of several in the Eastern Counties, as well as of one in his own immediate neighbourhood (Lord L., *in litt.*, November 26th, 1891).

There was a specimen of this Buzzard at Pincombe's, and another, shot in November 1836 at Egg Buckland, near Plymouth, was in Drew's collection (E. M., Mag. Nat. Hist. 1837, p. 113; and Rowe's Peramb. Dartmoor, p. 232). Two are said to have been obtained on Dartmoor, one of them about 1848. Two were obtained on Exmoor, in October or November, 1875; and another in the winter of 1876-77 (M. A. M., Zool. 1875, p. 4720; 1876, pp. 4814, 4870; 1877, p. 104; and J. H. G., Zool. 1876, p. 4901). One was shot, and another seen, at Ditsworthy warren, Dartmoor, January 31, 1877 (J. G., Zool. 1877, p. 163). A female trapped on Dartmoor, near Lustleigh, March 28, 1883, is in the possession of Mr. W. Vicary, of Newton Abbot ('Field' for April 28th, 1883; Trans. Devon. Assoc. 1884, p. 71).

A few examples of this Buzzard have been procured in Somerset and Dorset, but it is apparently extremely rare in Cornwall, which is beyond the limit of its western range.

THE EAGLES.

However great our ambition might be to claim the larger birds of prey as residents in Devonshire in by-gone years, if not in the present, we are compelled to own that no-



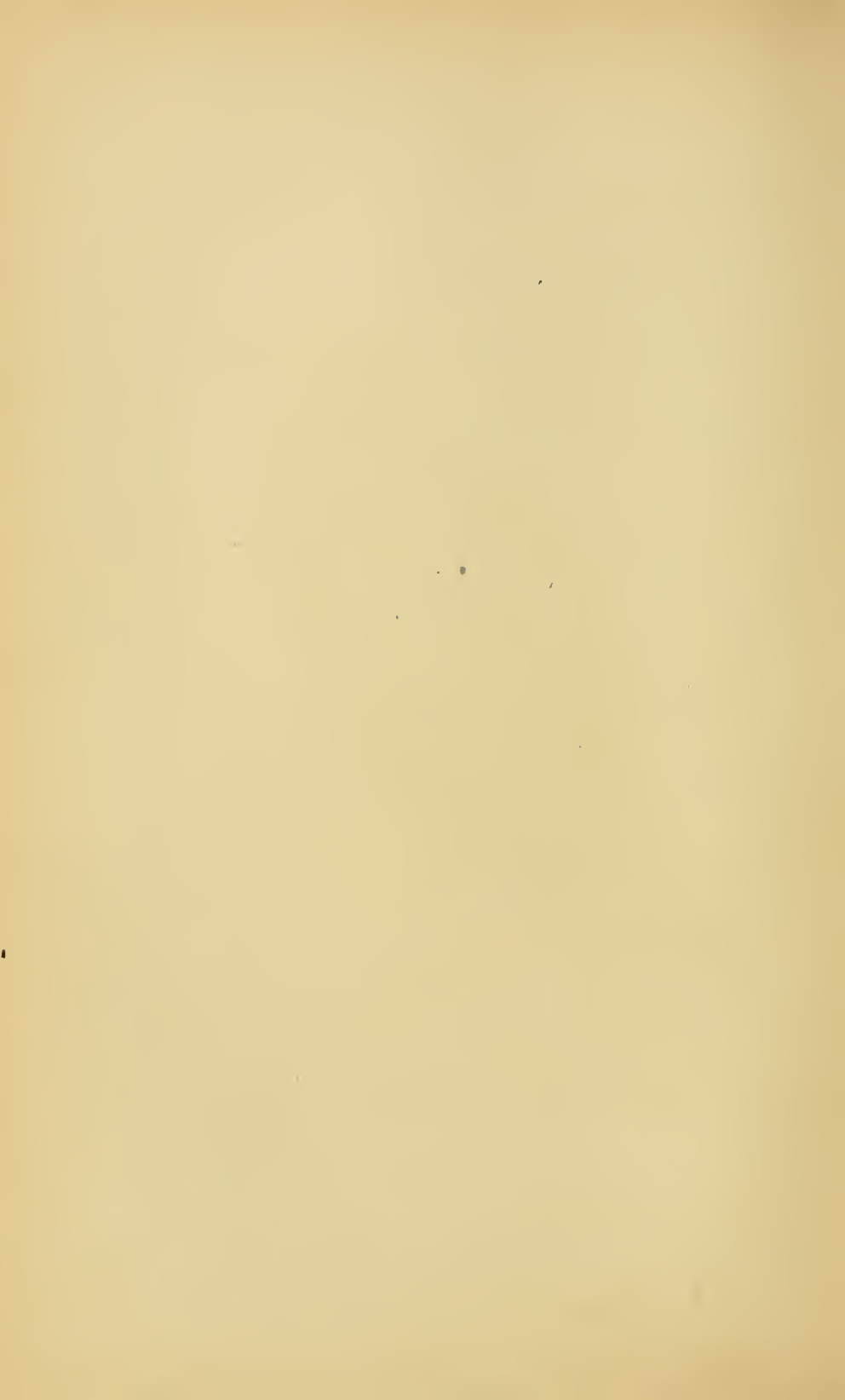
J. S. Zetlemeyer del. et lith.

Mintern Bros. Chrom. Lith.

ROUGH-LEGGED BUZZARD, Black Variety

Accipiter lagopus, (Linn.)

Illustrated by R. H. Forster



where in the South-west are there to be found precipices of sufficient ruggedness and grandeur to be worthy of the Mountain Eagle's eyrie. Dartmoor and Exmoor are downs with rounded ridges, which run in succession like the heads of billows, only here and there crowned on the former with some fantastic blocks of granite, hardly offering space enough to support the massive structure of the Eagle's nest. Along the coast there were, no doubt, a few eyries of the Erne, especially on spots frequented by Razorbills, Herring-Gulls, and other cliff-nesting birds which provided its daily meals. Tradition claims for the Dewerstone Rock, near Plymouth, and also for Lundy Island, with much probability, that they were formerly each of them occupied by a pair of White-tailed Eagles. In spite of their size and splendid flight, the position awarded to Eagles by the poets would hardly be acknowledged by the falconer, who looks upon them only as large Buzzards, not to be compared in courage and dash with his favourite Falcons, nor by the modern man of science, who regards other characters as of more importance in classification than strength and ferocity.

[**Spotted Eagle.** *Aquila clanga*, Pallas.

The Eagle whose plumage has obtained for it the above name is the young of one which, in its adult stage, is like a Golden Eagle in miniature, and has been described by ornithologists who have observed it in Central Europe as having many of the habits of the Common Buzzard. In the winter of 1858, Mr. Spencer Heaven, of Lundy Island, in turning a corner of the cliffs, came suddenly on an Eagle engaged in devouring a rabbit, and having a gun with him fired at it, when the bird, in its death-struggles, rolled over the edge of the cliff, and, falling into the sea below, could not be recovered. From some feathers which were picked up it was concluded that this bird was a Spotted Eagle in the same stage of plumage as two very fine examples soon after obtained in Cornwall, which also occurred in the winter—the first on 4th Dec., 1860, shot in the east of Cornwall, not very far from the Devonshire boundary, at Hawk's Wood, the property of Francis Rodd, Esq., of Trebartha. This beautiful bird was presented to the collection of his uncle, the late Mr. E. H. Rodd, of Pen-

zance, and on the death of that gentleman came, with the rest of his birds, back to Trebartha, where it is still preserved. The month of November, in the following year, produced the second example of this Eagle, which was shot in the Parish of St. Mawgan, near St. Columb, and was gorged with horse-flesh when killed. It is now in the Truro Museum, where we have seen it, and is as fine a specimen as the first.]

[**Golden Eagle.** *Aquila chrysaëtus* (Linn.).

A casual visitor, of very doubtful occurrence. Dr. Edward Moore writes of this species in his "List of Dartmoor Birds," in the Appendix to Rowe's 'Perambulation of Dartmoor' (1st ed. p. 232), as follows:—"The Golden Eagle has been associated traditionally with Dartmoor, and Mr. Gosling, of Leigham, who was well acquainted with the subject, informed me that there was an old-standing report that its nest was formerly known on the Dewerstone." Prof. Newton, however, considers that the Eagles seen there were of the White-tailed species (Yarrell's B. Birds, 4th ed. i. p. 27). The Golden Eagle is included amongst occasional visitors to Lundy Island, but probably in error (Trans. Devon. Assoc. iv. p. 605; viii. p. 308).]

White-tailed Eagle. *Haliaëtus albicilla* (Linn.).

A casual visitor, of occasional occurrence.

This noble bird is now only a straggler to our county, where it once used to nest. Most of the examples met with at the present day occur in the autumn and winter, and are young birds of the year on their passage south. In our youth we often visited a tame White-tailed Eagle which was kept chained in a small garden in Barnstaple, which had been captured in the neighbourhood. Several have been seen at different times on the north coast of Devon, near Ilfracombe, and Mr. G. Mathias, of that town, on more than one occasion, when out shooting in the winter of 1860, got close to one which, for a month or two, frequented the adjacent coast, and, greatly to his credit, refrained from killing it. In the collection of Dr. Woodforde, of Taunton, there was an example of a young White-tailed Eagle, which was caught alive at Holsworthy, and then carried about the country for exhibition. It died at Taunton, where the Doctor purchased it from its possessor.

We have a photograph of a very fine example which was shot near Tiverton in 1887. We have seen four or five specimens of the White-tailed Eagle which had been shot at various dates on the coast between Minehead and Bridgwater. One of these was a very fine adult, and was purchased for £10 by an American gentleman residing in Taunton, who kept it in a handsome case at the foot of his bed, saying it was "his national bird:" while the star-spangled banner waved from the wall above his head! White-tailed Eagles are occasionally seen on Exmoor. Two years ago a pair frequented the Quantocks in West Somerset, at the beginning of the year, and frightened the farmers by carrying off their

lambs. These birds were seen by some friends of ours when out with the hounds, on several occasions, and appear to have gone off uninjured.

Specimens of the White-tailed Eagle are very often recorded as Golden Eagles, and we have ourselves detected them as incorrectly labelled with the name of that bird, which only through stress or accident wanders away from its mountain fastness. Col. Montagu wrote:—"We have had two or three specimens of *Ossifraga* [the name he gave to the immature Sea-Eagle] sent to us for the *Chrysætos*." The points of distinction between the two species are so great that it is surprising any confusion can arise between them, and that this mistake should so continually recur. The best and simplest of these differences are the feathered tarsi of the Golden Eagle, and the bare tarsi of the Sea-Eagle. If you have an Eagle with feet feathered like a Grouse, then you may be positive that your bird is *not* a Sea-Eagle, and may, probably, be a Golden Eagle.

The Sea-Eagle was, in all likelihood, the species which bred at the Dewerstone Rock on the Plym, near Plymouth, as already mentioned under the Golden Eagle. Polwhele, in his 'History of Devonshire' (vol. i. chap. vi. p. 101), mentions a "black Eagle" as formerly having a nest in the woods of Eggesford (a corruption of Eaglesford?)*, and states it to have been frequently seen on the Moor. Probably it was the present species, or, more likely still, a Common Buzzard, in old days often called "the Eagle" in Devonshire, though Polwhele speaks of its having the basal part of the tail white, as in the young of the Golden Eagle, apparently not from his own observation, but following Pennant.

Dr. E. Moore records "a specimen caught near the Eddystone, which was kept alive some years by the late Addis Archer, Esq., at Leigham, near Plymouth. In the summer of 1832 one was frequently seen by the gentlemen of the hunt, hovering over Dartmoor, and in October of that year a fine specimen, probably the same, was shot near Kingsbridge by W. Elliot, Esq., in whose possession it still remains" (Mag. Nat. Hist. 1837). Mr. Edmund A. S. Elliot informs us that amongst the birds of prey collected by his late father, Mr. J. Elliot of Kingsbridge, is a bird of this species, which was obtained by him in the flesh from a man who shot it in Halwell Wood. This was in the year 1832, and the specimen is, without doubt, the same as that mentioned by Dr. Moore as above.

One shot in 1834, near Bridestowe, was in Drew's collection (E. M., *op. cit.*). A specimen was captured alive at Holsworthy, North Devon, its feet having become entangled in a furze bush, and was brought alive to Exeter, where it was exhibited for some time by its captors. We saw this bird in January 1856, and recorded its occurrence in the 'Zoologist' for May 1856, p. 5096. One, in immature plumage, was killed by

* Lord Portsmouth suggests that, possibly, Eggesford may be derived from *ecclesia*, owing to some ancient church or chapel being situated at that place, and instances Ecclescliffe, on the borders of Yorkshire and Durham, now called Eaglescliffe. Mr. F. Edmunds, in 'Traces of History in the names of Places,' says: "Eggesford (Devon), the ford of *Egga*, the owner's name." In a Saxon document relating to Crediton in the British Museum, Cotton Roll II. 11, the name of Æthelgar, Bishop of Crediton, is written *Elger* and *Elger*.

Mr. Snow, of Oare, on the borders of Devon, a few years before 1874, and was recorded in 'Science Gossip' (1872, pp. 115, 116; 1874, pp. 214, 283) as a Golden Eagle (C. S., Zool. 1875, p. 4334). Two were shot near Tiverton in 1887, the last of them on 27th December; it weighed 10 lbs. (Trans. Devon. Assoc. vol. xx. p. 40, 1888). An Eagle, probably of this species, was seen on Dartmoor in May and June, 1891, and an immature female was trapped at Dartmouth in the autumn of that year (J. B. R.).

The White-tailed Eagle is included amongst occasional visitors to Lundy Island, and is said to have formerly bred there (Trans. Devon. Assoc. iv. p. 605, and viii. p. 308: Harting's Handbook of B. Birds, p. 3).

The White-tailed Eagle, according to Mr. E. H. Rodd, has been met with but very rarely of recent years in Cornwall, and all the specimens reported were in immature plumage. One was killed at Carnekey, in the parish of Kilkhampton, on the north coast, close to Devonshire, November 9th, 1844. It has occurred a few times in recent years in Dorset.

[Gos-Hawk. *Astur palumbarius* (Linn.).

The occurrence of this bird in Devon is very doubtful. It appears to have been admitted into the Devonshire Fauna on the authority of Dr. Tucker, of Ashburton, who includes it in a "List of some rare Land-Birds which have been discovered in the neighbourhood of Ashburton," in Jones's 'Guide to the Scenery,' 1823, and of his sons, who enumerate it in a "List of Dartmoor Birds" in 'Carrington's Dartmoor,' 1826, p. lxxix. Dr. Edward Moore, in his "List of Birds of Devonshire," in Mag. Nat. Hist. n. s. vol. i. March 1837, observes:—"Found on Dartmoor, *vide* Carrington's Poem 'Dartmoor.' A nest was seen by Bolitho of Devonport at South Tawton, and one of the old birds was wounded, but *escaped*." But in his "List of the Birds of Dartmoor," in the appendix to Rowe's 'Perambulation,' 1st ed. 1848, p. 229, he says, "seen on the Moor. A specimen at Bolitho's was shot on the nest near South Tawton in 1830."

The Gos-Hawk very rarely indeed, if ever, visits the South-western Counties, and we do not know any collection which possesses a specimen. However, it will not do to pass the bird over without notice, since Dr. Edward Moore has related, as quoted above, that a Gos-Hawk's nest existed at South Tawton on the borders of the Forest in 1830, and that one of the birds was shot upon the nest. This bird was taken to Bolitho, the bird-preserver of Plymouth, and was sold by him to a Col. Burton. When interrogated by Mr. J. Gatcombe, Bolitho insisted that he had had a Gos-Hawk to stuff many years ago, and that he saw another hanging up in a gamekeeper's "larder" a few years since, which was too far decayed to do anything with. In his Nat. Hist. of S. Devon, Bellamy has recorded the occurrence of a young Gos-Hawk near Falmouth, in August 1838, and says "it probably breeds on the coast" (!).

Now we are pretty confident that no dependence is to be placed on these stories, and that the Gos-Hawk's nest mentioned above was, perhaps, that of a Sparrow-Hawk, the female having been mistaken for the larger and rarer species. Mr. Gatcombe suggests that this Devonshire Gos-Hawk may have

been a female Peregrine with a strongly barred breast. But we are inclined to assent to an explanation which has been offered by Lord Lilford, who has little doubt that a confusion has arisen between the "Gorse-Hawk," one of the provincial names of the Hen-Harrier, and Gos-Hawk; and that this confusion has occasioned the mistake.

In old days no hawking establishment was complete without one or two trained Gos-Hawks, which were used to fly at ground-game, thus varying the sport to be enjoyed with the Peregrines and Merlins, whose quarry was always killed in the air. The Gos-Hawks thus made themselves of use in capturing the food-supply of the other, nobler Hawks, which they were expected to maintain, and, on this account, were commonly termed "the Cooks," as we have been informed by the Rev. W. Willimott, who is a great admirer of the Gos-Hawk. In the present revival of hawking a good many Gos-Hawks are kept for taking rabbits; the trained bird follows the started rabbit swiftly over the ground and, coming up with it, seizes it by the head and throat with its powerful talons, and holds it until the attendant comes up. The Gos-Hawks employed are captured in Germany for the purpose.]

Sparrow-Hawk. *Accipiter nisus* (Linn.).

Resident, generally distributed in wooded districts, and tolerably numerous, although much persecuted. Breeds. The Sparrow-Hawk seems formerly to have been the most abundant species of Hawk in Devonshire. Hooker (16th cent.) says, when enumerating the principal birds of Devon:—"likewise for Hawkes of all kinds great store and abundance; which the Sparrow Hawke in this county is the chiefest" (Portledge MS. p. 6).

Ovid gave an apt description of the life of a Sparrow-Hawk in a few words, when he wrote of it "*semper vivit in armis.*" There is no Hawk on our British list which is more fierce, or more untamable, than this feathered Ishmaelite. The old Greek poet, in some magnificent lines, declared that all living things might be subdued by human influence, but the Sparrow-Hawk is nearly the exception. Although there have been falconers who, with infinite patience, have brought Sparrow-Hawks into some degree of training, and have actually had flights with them, yet the majority of men would soon give over so weary a task as that of attempting to tame the untamable. The Sparrow-Hawk is ready to fly at anything; but a Blackbird is, perhaps, his favourite quarry, although any small bird will serve him for a meal. It is of the cock we are now speaking. The hen Sparrow-Hawk is a far more formidable bird, and there is none more to be dreaded by the game-preserve, as she is more deadly than the Peregrine, and has the strength to carry off Partridges, young Pheasants, and tame Pigeons; and when she has once tasted the last, she will return again and again "to flutter the dove-cots." Mr. Cecil Smith even relates an instance where a hen Sparrow-Hawk was seen to knock a cock Pheasant off his roost, and was proceeding to make short work with him when the

keeper shot her. But it is a curious fact that this dangerous bird is seldom seen, even in districts where Sparrow-Hawks are still comparatively plentiful. A dozen male Sparrow-Hawks may be met with to one female. These stronger and larger birds, decidedly the better halves of the Sparrow-Hawk family, for they are fully one third as large again as their mates, have a way of keeping out of sight, and very often some other large Hawk (a Peregrine, a Buzzard, or a Harrier) is charged with the damage of which a female Sparrow-Hawk, keeping close in some thick fir-plantation, is the real author. Captain Shelley and Mr. Cavendish Taylor have noticed in Egypt the same fact of the preponderance of males in the case of the Merlin, sometimes counting thirty male birds to one female. The Sparrow-Hawk takes its prey by swooping low above the ground, skimming, like a Grouse, over every rise and fall, that it may come upon its victim unawares; so that one of Sam Weller's immortal *mots*, "I'll be with you in a minute, as the Sparrow-Hawk said when he heard the Robin singing round the corner," is very true to life.

One day, when shooting on the Braunton Burrows, we stooped down to whistle some Golden Plovers passing over, when a cock Sparrow-Hawk, deceived by our voice, skimmed suddenly over the ridge of sand just above and, on discovering his mistake, made off in great haste and alarm. We have had these bold birds carry off our dead *Tringa* right under our nose, after we had fired a shot on the sands. The male Sparrow-Hawk, in his pursuit of the Blackbird, follows it in headlong flight through the bushes in which the quarry vainly seeks refuge. One season we were annoyed by a Sparrow-Hawk's persistently working a small marsh below our house, and striking down every Teal and Snipe as the birds dropped in, carrying the Snipe always to a small stile in one of the covers to eat them at leisure, where we were disgusted to find the ground beneath littered with Snipe-feathers. Sparrow-Hawks sometimes devote themselves for a time exclusively to Wood-Pigeons, striking them off their perches on the trees; and will continue to do this until they have destroyed every bird coming to a plantation to roost. A young male Sparrow-Hawk, one out of a brood we were vainly attempting to train, one day nearly murdered one of Mr. W. Brodrick's favourite Falcons, of which we had the temporary charge, as she was sitting on our gloved hand to eat her dinner. We chanced to be standing sufficiently near the bow-perch, on which the young Hawks were seated, to be within distance of the leash of one of them, which, to our astonishment, suddenly flew up, and caught the Falcon round the throat with the tight grip of his long feet and claws, and we had some difficulty in saving the Falcon from being throttled.

In spite of the constant war carried on against it by gamekeepers, the Sparrow-Hawk is still fairly common in the county, as there are numerous wild districts, where keepers are few, in which it is able to recruit its numbers. Its favourite nesting-place is a fir-plantation, where it chooses some old Crow's or Magpie's nest. The plaintive wailing of the young often betrays the position to the destroyer.

The Sparrow-Hawk sometimes receives considerable accessions to its numbers in autumn in Western Devon, as in September 1873, and Sep-

tember and November 1874 (J. G., Zool. 1873, p. 3783; 1874, p. 4253; 1875, p. 4371). Bolitho, the Plymouth bird-stuffer, received fifty-nine specimens in twenty years between 1852-72. It was most numerous in 1861. An albino killed at Castle Hill, North Devon, June 28th, 1849, from Mr. R. Cumming's collection, is now in the A. M. M. An old male shot November 21st, 1891, between Modbury and Ivybridge, was white washed over with smoky or dusky colour, especially on the head and upper wing-coverts near the carpal joint. There were indistinct marks across the breast and on the under wing-coverts (R. P. N.).

Kite. *Milvus iclinus*, Savigny.

[Fork-tailed Kite.]

A casual visitor, of rare occurrence at the present day. It is said to have been common in the neighbourhood of Dartmoor at the end of the last century (T. J., Bray's 'Tamar and Tavy,' vol. i. p. 346; and E. M., Trans. Plym. Inst. 1830). Montagu, however, in the Supplement to his 'Ornithological Dictionary' (1813), says:—"In twelve years' residence in Devonshire we never observed but one in the southern district of that county;" and in a MS. Note-book for 1798, kindly lent us by the late Rev. John Hellins, he observes that he had met with "the Kite rarely" in Devon. In the Church Wardens' Books of the Parish of Littleham are a few notices of rewards paid for killing "Kitts," which, however, may have been only Buzzards. "1658. Paid for eight Kitts killing . . . 1s. 4d. 1664. Paid Ser John Rolle man for killing of Keete . . . 1s. 1674. Paid John Drake for killing of Keets . . . 6d." (Rev. W. Webb, 'Memorials of Exmouth,' pp. 121, 122, 123). Country people in Devonshire usually call Buzzards and, indeed, all large Hawks, "Kitts" or "Keets," and we believe that, if the genuine "Fork-tailed Kite" was ever plentiful in this county, it must have been a very long time ago. Mr. E. H. Rodd, however, speaks of it as breeding in King's Wood, near Holne Chase, on the eastern borders of Dartmoor, and says no Hawk was better known in the large woodland districts of the central part of Devon when he was a schoolboy at Buckfastleigh (B. of Cornwall, pp. 11, 200; Zool. 1870, p. 1980). If this was a fact, and not a confusion of memory, it is remarkable that Montagu should have known nothing about it, though in constant correspondence with Dr. A. G. Tucker, of Ashburton, which is close to Buckfastleigh and Holne Chase. Turton and Kingston (1830) say it was "found in the more wooded parts of the district; rather a scarce bird; makes a nest with sticks, which it lines with wool." We suspect this latter piece of information was copied from Montagu.

But we do not believe that the Kite was at any time as common in Devonshire, or any of the South-western Counties, as it was formerly in the Home Counties and in other parts of England. Only one example came under Col. Montagu's notice during his residence of twelve years in South Devon, although, from the manner in which he writes, the Kite was

evidently no rarity in his time in many districts in the kingdom. We have only once seen a Kite in North Devon, and this was many years ago, near Bratton Fleming. "The wheeling Kite's wild solitary cry"* is now unheard throughout the South of England. Although Mr. Rodd could remember its breeding annually in some large woods in Cornwall, it is now as rarely seen in that county as it is in Devon. Mr. Rodd's own collection possessed a fine female shot at Trebartha in 1867, and we have seen a pair of Kites in the Truro Museum, which were obtained near Mevagissy, and were presented to the Museum by Mr. Tremayne, M.P. The Kite is equally rare in Somerset: we know of one which was trapped at Bagborough, on the Quantock Hills, and of another, the most recent occurrence in Somerset of which we have information, in West Coker Wood, near Yeovil, shot in the spring of 1875, which is now in the Taunton Castle Museum. A pair of Kites frequented the neighbourhood of Dorchester in the early summer of 1888, and would probably have nested if one of the birds had not unfortunately been killed through eating some poisoned carrion laid down for foxes, when the other bird disappeared (Mansel-Pleydell, Zool. 1888, p. 267).

The rapid and almost complete extermination of the Kite in the British Islands since the introduction of percussion guns and of more general game-preserving, while many others of the Hawk family, although equally persecuted, still contrive to hold their own in more or less numbers, seems to indicate that the Kite is a foolish, blundering bird, less capable of taking care of itself and of avoiding its enemies; and by its frequent forays upon the poultry-yard it more often came in the way of danger. There are one or two places where the Kite still nests in Wales and Scotland, and it would be a matter of rejoicing to English ornithologists if this interesting old English bird, protected in these, its last sanctuaries, might be permitted once more to extend itself throughout the country.

According to Dr. E. Moore there was a specimen of the Kite caught at Trowlesworthy Warren, Dartmoor, in 1831, in Capt. Morshead's collection at Wides; another at Saltram; and another in the collection of Mr. Sydenham, a dyer at Plymouth, which was shot in 1835. Drew and Bolitho each had examples, but at the time Dr. Moore wrote the Kite was annually becoming more rare (Mag. Nat. Hist. 1837, p. 113; Rowe's Peramb. Dartmoor, 1st ed. 1848, p. 229). An adult female was trapped near Trowlesworthy Rabbit-warren, on Shaugh Moor, near Plymouth, Sept. 17th, 1851, a pair having been seen there on June 18th previously (R. A. J., 'Naturalist,' 1852, p. 7). This female was probably the specimen which was in the collection of Rev. C. Bulteel, and passed into the possession of Mr. Richard Andrew, of Modbury. One occurred at Dartmouth, Dec. 1852. An old male was shot at Weeke, in the parish of Loddiswell, on the bank of the Avon, whilst feeding on a dead sheep, Sunday, Oct. 13th, 1862, by Mr. Adams, who was on his way to church, but returned home for his gun. This bird was in the collection of the late Mr. John Elliot, of Tresillian House, Kingsbridge (H. N., Zool. 1863, p. 8325; J. B. R., Trans. Plym. Inst. 1862-63, p. 53; E. A. S. E., *in litt.*). A male shot on the cliffs adjoining the sea at Coulton, Kingswear, by Mr. Bastard in March 1864, is in the collection of Mr. Henry Nicholls, at Kingsbridge (H. N., MS. Notes; Zool. 1864, p. 9039). One was seen by Mr. E. A. S. Elliot, between Bolbury and Hope, near Kingsbridge, March 19th, 1888.

A pair shot in Yarnar Wood are now in the possession of Mr. Watts of Forde House,

* Keble, 'Christian Year,' XXth S. after Trinity.

Newton Abbot (W. R. H. J., Trans. Devon. Assoc. 1874, p. 709). Kites are said to have been seen in December 1880 at Newton Abbot, and near Chagford in May 1890 (R. M. J. Teil, 'Field,' Dec. 11th, 1880, and May 24th, 1890).

A female was shot on Haldon, near Exeter, about 1864, and having been first in Mr. Byne's collection, passed into the hands of the late Mr. Marsh-Dunn, of Teignmouth.

An adult was trapped by one of the keepers of Mr. Halliday, of Glenthorne, at Countisbury, near Lynton, N. Devon, May 1861 (M. A. M., Zool. 1861, p. 7544). A very fine old male, shot at West Down, near Ilfracombe, in October 1886, is in our own collection (M. A. M.).

Honey-Buzzard. *Pernis apivorus* (Linn.).

A casual visitor, of very rare occurrence, during the summer months.

This singular bird is very rare indeed in Devonshire, perhaps because the beech, its favourite tree, is comparatively scarce in our parks and woodlands. It is, moreover, extremely local, there being a few places in the kingdom, some well known, and others whose secret is properly guarded, in which it appears with some regularity. We never saw one in North Devon, nor have we ever handled a Devonshire specimen, whereas in a very limited district near Taunton, on the Quantock Hills, four examples came within our experience. Two of these were obtained in Cothelstone Park, another was trapped on the adjoining property of Bagborough, and we ourselves saw the companion bird of one of these victims when we were taking a walk on Cothelstone Hill.

Two immigrations of the Honey Buzzard visit this country each year— one in the spring, of old birds anxious to find nesting-quarters, and too generally doomed to slaughter, and another, and this chiefly on the Eastern coast, of young birds of the year, in the autumn.

The Honey-Buzzard obtains its name from its partiality to the grubs of bees and wasps, to procure which it eagerly seeks for the nests of those insects, and many have been lured to destruction by traps baited with honey-comb. It also feeds on birds' eggs, young rabbits, small birds, &c., but its feeble feet and small talons indicate that it cannot be formidable to game. In its plumage it varies more than any other species of Buzzard, and passes through numerous stages between the dark chocolate-brown of the young birds of the year, and the full adult plumage, which, in the male, is marked by a grey cap and pure white underparts, in which dress our friend Mr. W. Brodrick believed it had never been met with in the British Isles. The Honey-Buzzard nests commonly before it attains its full plumage; a pair in our collection, which, we grieve to say, were shot off their nest in the New Forest, are still in an immature stage.

A Honey-Buzzard is believed to have been seen hawking for dragonflies, and skimming over the water, at Slapton Ley, by Rev. Mr. Holdsworth some years before 1813 (Montagu's Orn. Dict., Suppl.); and Bellamy says that it has been taken in that locality (N. Hist. S. Devon, p. 139). One shot near Woodleigh, about 1830 or 1840, passed first into the hands of the Rev. Edward Luscombe, and afterwards into the collection of the late Mr. J. Elliot (H. N. and E. A. S. E., MS. Notes). One was trapped on Dartmoor in 1848, and a very fine male bird was caught in a gin in July 1850 on Lord Morley's property, near Plymouth (R. A. J., 'Naturalist,' 1851, p. 58). This last bird

was found by the keeper sitting on a pheasant's nest, and had been feeding on the eggs; for one was broken, and of another nothing but the shell was left, and the keeper thought it had been sucked. One was shot near Flete, and formerly belonged to the collection of the late Rev. Courtenay Bulteel, but is now, with the rest of that gentleman's birds, the property of Mr. Andrews, of Modbury (H. N.). A female was obtained in North Devon in May 1866 (Zool. 1866, p. 308). An immature specimen was shot Oct. 12th, 1881, at Spriddlestowe, near Plymouth (Zool. 1882, p. 64). This bird and the two killed in 1848 and 1850 were examined by Mr. J. Gatcombe. That shot in 1848 had the stomach filled with "long whitish caterpillars," and that obtained in 1881 with white feathers, apparently its own.

The Honey-Buzzard has occasionally been noted in Cornwall, and there is a strong presumption that it has, once at least, nested in the county, as "a very young male, with its primaries not full-grown, and which, therefore, could not long have left the nest, was sent to Dr. Leach from Cornwall, and is now in the National Collection." (Mag. Nat. Hist. 1837, p. 339).

Though Mr. Cecil Smith does not include the Honey-Buzzard in his 'Birds of Somerset,' we know of seven or eight instances of its occurrence in his county, of which no less than five were in his own immediate neighbourhood!

THE FALCONS.

We have now reached the true Falcons*, birds of great courage and docility, swift and powerful on wing, greatly valued throughout the world for the assistance which, when trained, they can render to sport, and distinguished by the projecting tooth on the cutting-edge of their upper mandible, by their flight-feathers—the first and third being equal in length, while the second is the longest,—and by their strong feet and sharp, curved talons; and some of them, like the Peregrine, Hobby, and Merlin, have a characteristic line of black feathers extending downwards on either side from the gape, termed by falconers the moustache.

Greenland Falcon. *Hierofalco candicans* (Gmel.).

An accidental visitor, of extremely rare occurrence.

First on our list is placed a beautiful and rare Falcon, whose home lies to the far north, where it is the companion, in the bleak countries round

* The Falcons take their name from their powerful curved beak (*falx*, a cutting-hook); and *Gyr* or *Jer Falcon* would mean the Falcon pre-eminent in size. *Jer*, *Gyr*, *Geier*, = a Vulture or Kite.

the pole, of the Snowy Owl, and is only by some accident, when following the autumnal migrations of waterfowl, ever driven so far south as to reach our shores. The Greenland Falcon is the whitest of the three subspecies of Gyr Falcon now distinguished by ornithologists, and extends its range further to the north than either the Iceland or the Norway Falcons. Only two examples of it are known to us as having been obtained in Devonshire, and two in Cornwall, the first of which, according to Mr. Hill's 'Catalogue of the Birds of the Lizard district,' was shot at Gwavas Farm, in Grade, in the year 1830. For our knowledge of the second Cornish specimen we are indebted to the Rev. W. Willimott, who writes: "There is in the collection at Scorrier House, Redruth, the seat of the late George Williams, Esq., a Greenland Gyr Tiercel, shot a few years ago on his property, the Goonhilly Downs, in the Lizard district. It is a very beautiful specimen, nearly snow-white, with very few dark spots, the whitest I ever saw living or dead; it was shot on a Pigeon, which it was seen to knock down." From the description given us of a Gyr Falcon which was shot on Lundy Island many years ago, in the month of November, by Mr. Philip Wathen while Woodcock-shooting, which was a very white bird, we have no doubt that it was also a Greenland Falcon. This is one of the two Devonshire specimens, and is still preserved in Bristol; the other, which occurred at Plymouth, we have seen in the fine collection of the late Mr. E. H. Rodd at Penzance, and is also a remarkably white bird. Greenland and Iceland Falcons are sometimes brought to this country in whaling-ships returning from the Polar Regions, and command a high price from falconers, and it is not unlikely that some of these may have escaped and furnished collectors with "British" specimens of these rare Falcons. Thus, in January 1870, a fine young female Iceland Falcon, curiously caught among some sedges in the parish of St. Merryn, near Padstow, and recorded at the time by Mr. E. H. Rodd (Zool. 1870, pp. 2017 and 2060), was, without doubt, as that gentleman was informed by the well-known falconer, Major Fisher, of The Castle, Stroud, an escaped bird from Cardiff, where a number of Iceland Falcons, recently imported from Iceland, were at that time kept and flown.

Dr. Edward Moore records the capture of a 'Gyr Falcon' on the Lynher River, near Plymouth, Feb. 7th, 1834. It was wounded in one wing, and was kept alive by Pincombe, the bird-stuffer, for some time (Mag. Nat. Hist. 1837). This is the same specimen as the one said to have been taken at Port Eliot, St. Germans, Cornwall, which was in the collection of the late Mr. E. H. Rodd, of Penzance (Newton, Yarrell's B. Birds, 4th ed. i. p. 42). It is also probably the same as that mentioned by Bellamy under the name of "*Falco islandicus*," which he says was taken from the Morwell rocks on the Tamar, Feb. 7th, 1834 (Nat. Hist. S. Devon, p. 199). It remained in Pincombe's possession up to June 1863, when it was purchased by Mr. Rodd (Zool. 1863, p. 8678). An "Iceland Falcon" in Mr. F. C. Hingston's collection is said to have been shot near Plymouth (E. A. S. E.).

A specimen of the "Gyr Falcon" was shot on the top of Bullock Hill, near Balsdean, Sussex, Sept. 26th, 1882, and was sent to Mr. Swaysland, taxidermist, of Queen's Road, Brighton. It was determined to be an

adult Greenland Falcon by Mr. J. H. Gurney (Zool. 1883, p. 80). By a curious coincidence it is not at all unlikely that this same Falcon was seen by Mr. Henry Swaysland, Jr., in the previous June, near Rousdon, Lyme Regis, the seat of Sir Henry Peek, Bart., M.P. Mr. Swaysland saw a White Falcon sitting on the cliffs, and approached it within a distance of thirty yards. It had been observed about Rousdon for some two months previously (Zool. 1883, p. 34).

“The Gyr-Falcon, *Falco Islandicus*,” is mentioned amongst “occasional visitors” in a list of Lundy Island Birds (Trans. Dev. Assoc. viii, p. 308). Probably the Greenland Falcon shot by Mr. Wathen, when Woodcock-shooting there, was the foundation for this statement.

This bird, it is now known, occurs not unfrequently on the east coast of Ireland, and is therefore not at all unlikely to visit Lundy Island and the Devonshire coast occasionally.

[*Observation.*—There is a fine example of the Greenland Falcon in the National Collection at South Kensington, which was shot many years ago in one of Lord Cawdor’s covers at Stackpole, in Pembrokeshire (‘Zoologist,’ 1850, p. 2639). It had been observed by one of the keepers for eight or ten days before he succeeded in shooting it, and each day had killed and partly devoured a cock Pheasant. It was very shy, always perching on some rocky eminence, so that it was difficult to get at, and was finally surprised and shot as it was rising from a freshly killed Pheasant. This is the bird figured in Yarrell.]

Peregrine Falcon. *Falco peregrinus*, Tunstall.

[Cliff-Hawk, Blue Hawk.]

Resident, and not unfrequently met with throughout the county, especially on the sea-coast. We have found notices of more than fifty specimens which have been obtained in the county since 1853, and many others have been killed which have not been recorded. The Peregrine Falcon breeds in several places on the cliffs of both the north and south coasts, and on Lundy Island.

A pair have bred for many years on the cliffs at Wembury, near Plymouth (R. A. J., ‘Naturalist,’ 1852, p. 117; J. G., Zool. 1877, p. 280; 1885, p. 22); others have bred at Watcombe, near Torquay, and at the Start Point (A. von H., Zool. 1869, p. 1846). Peregrine Falcons are believed to breed about the Bolt Head (R. P. N., MS. Notes); as well as at Sidmouth and Rousdon (Zool. 1884, p. 35).

We have examined many specimens of this bird, and have almost invariably found them much infested by the parasitical worm, *Filaria attenuata*, deeply imbedded, and twisted up in the membranes, between the ribs and the liver, and even penetrating the substance of the liver itself. A fine female shot near Exeter, April 3rd, 1883, thus infested, was fat, and weighed 3 lb. 1½ oz.

The Peregrine Falcon, the noblest of our English raptorial birds, is peculiarly a denizen of the coast, and is rarely found far inland. For this reason it is sometimes called the Cliff-Hawk. It is not uncommon along the whole seaboard of the South-western Counties, and the Peregrines of

the West Country are a fine, white-chested race; those of Lundy Island, in particular, being famed for their courage. A cast of Hawks from this picturesque island was in old days highly valued by falconers, and the estimation in which the Lundy Peregrines were anciently held still continues.

Major Fisher, of The Castle, Stroud, informs us that, after an experience of Peregrines from every part of the United Kingdom, extending over thirty-three years, he has found the Lundy Peregrines by far the best for falconers' use, and recently described in the 'Field' the good work of a Falcon received as an eyas from the island.

It is a matter of surprise that the Peregrine should still be able to maintain itself in a few eyries on the northern and southern coasts of Devon, for (we deeply regret to say) this fine bird is subjected to ceaseless persecution. We have known cases of the young birds having been cruelly shot upon the nest, of many and many an old bird having been trapped and shot, and even on Lundy Island, the ancestral stronghold of the Peregrines of the West, the birds were driven away for a time by constant harrying of their nests; but we are glad to be able to state that they have returned, and our information from the island enables us to mention two eyries having been occupied there this last spring (1891). The Peregrine is, moreover, so fearless a bird that often, in curiosity, or through an interest in sport, it flies close up to the shooter and does not always escape. When gorged after a meal we have known it perch in a lethargic state upon a bank or rail, and suffer Blackbird-shooting school-boys to approach and to do it to death. A splendid pair, in our possession, were slain in this unworthy manner on the banks of the Barnstaple river. Instances have been known of the Peregrine nesting in an old Raven's nest. Mr. W. Brodriek obtained some young Hawks from a Raven's nest near Ilfracombe. But the usual site of the eyrie is on a cliff, often immediately beneath some overhanging rock, so that it becomes a dangerous task for the cragsman who seeks to rob it, and the nest is sometimes, like that of the Raven and Chough, placed in a spot which it is impossible to reach. The Peregrine likes society*, and chooses the cliffs which are frequented by Herring-Gulls, Choughs, Jackdaws, and Guillemots, who, as we have often noticed, seem quite indifferent to their dangerous neighbour, showing that the Peregrine's quarry is sought for at some distance from its nest. It is a pretty sight to look down from the top upon the silver Herring-Gulls, their nests on almost every ledge, some with the birds sitting upon them, others uncovered and revealing the eggs in their speckled beauty, while Jackdaws are flying incessantly into the crevices where their nestlings are secreted, and every now and then fussy little parties of Guillemots descend from the lower ledges of the cliffs towards the water, along the surface of which they skim for a little distance, and then alight to pursue their fishing in its green depths. Soaring above the edge of the cliff will be, probably, a pair of Kestrels, and suddenly a

* Baggy Point, the eastward boundary of Barnstaple Bay, and Wembury Cliff, near Plymouth, are two of the places where Peregrines breed annually in the midst of a colony of Herring-Gulls.

Peregrine will shoot out from his station beneath, impatient at the intrusion of a stranger upon his domain, and with an angry bark * will sweep out over the sea, returning landwards again and circling watchfully overhead. When we were Woodcock-shooting on Lundy Island, hardly a couple of shots were fired before the party of guns were joined by a Peregrine, and soon after by a second, and the Hawks kept in close attendance, in the technical phrase of falconry "waiting on" above the sportsmen and their dogs; and when a cock or snipe was flushed, if it was missed, it had next to run the gauntlet of the two birds, who, between them, generally secured it. Sometimes a wounded cock was pounced upon, and carried off right in front of the shooters, to whose guns the Peregrines were sacred, and they seemed to be aware of their immunity. There are many instances on record of other raptorial birds, besides the Peregrine, accompanying shooting-parties. Their hunting instincts lead them to take an interest in the sport, and they play the part of criticizing and sympathizing spectators, or they draw near in the hopes of sharing in the spoil. Col. Montagu tells us that twice, when he was shooting in the Highlands, a Golden Eagle suddenly put in an appearance and carried off a wounded Grouse, descending from an adjacent lofty cliff, where it had been curiously observing the actions of the sportsmen. Mr. J. H. Gurney, Jr., while shooting Quails in Egypt, was attended by a Short-toed Eagle, which took great interest in his proceedings, until, approaching too near, it was itself brought to bag with a wire-cartridge. Some Lanners, also, were attracted by his shooting. In Ireland the plucky little Merlin will often keep company with the Snipe-shooter on the bogs, to take advantage of the quarry sprung for him. We have already related the audacity of a male Sparrow-Hawk in carrying off our wounded *Tringa* on the sands under our very nose: and Lord Lilford has recorded in 'The Ibis' for 1860, p. 8, that a Gos-Hawk stooped at a Woodcock which he had wounded. And, to add yet one more example to a list which might readily be increased, Richardson has related that, in the Fur Countries of N. America, he has seen a Snowy Owl watching Grouse-shooters from a high tree and that when a bird was shot the Owl skimmed down and carried it off before the sportsmen could come up.

Mr. W. Brodrick, one of the authors of 'Falconry in the British Isles,' at the time he resided at Ilfracombe, kept several trained Peregrines, flying them at Pigeons, and occasionally at Rooks, Herring-Gulls, and Snipe, on the high grounds above the town. In spite of their bells and dangling jesses, on more than one occasion they were shot by ignorant people, who flattered themselves they had performed a meritorious act in butchering a Hawk, so that the science of falconry had to be practised under many trials and drawbacks. More Peregrines are seen in the autumn than at any other time of the year, as the young birds are then on passage going south. In a short walk along the north coast of Devon in September 1875 we counted no less than five Peregrines on wing. These young "Passage Hawks" were considered by falconers, when caught and trained,

* Mr. J. Gatecombe well wrote:—"The cry of the Peregrine at the breeding-season is the most angry and menacing of any bird I know."

to make better birds for flights at the Heron than young birds ("eyases") which had been reared and trained from the nest, and had never had the advantage of developing the muscles of their wings in the free air. The Peregrine, both in its wild and trained states, will make flights in sheer wantonness at almost every other bird; Lord Lilford, in Albania, saw one actually fly at and "hustle" such a powerful bird as the Eagle-Owl. "Comet," a great favourite and a very docile Tiercel* belonging to Mr. Brodriek, once made a dash at a Great Northern Diver which chanced, with a hoarse cry, to pass overhead. We have witnessed a Tiercel flying at three Herons which came blundering awkwardly, with loud complaints and great alarm, down a valley, and it was evident all the time that the Tiercel was only in fun and teasing the birds.

Falcons of the year are liable to very great variety in plumage. One of the most beautiful Falcons we ever saw was one which was shot in the parish of Stogursey, in W. Somerset, in November, and was brought to the Taunton bird-stuffer for preservation. This bird was of large size, and had so much straw-yellow both on the poll of the head and the back of the neck as to resemble a Lanner. Earlier in the year, young birds are of a dark chocolate-brown, marked on the underparts with longitudinal streaks of a darker colour.

The Peregrine will strike down and devour almost any bird. Jackdaws are, perhaps, its favourite dainty; but we have seen a Peregrine drop like a thunderbolt into a little flock of Wild Duck or Wigeon, and kill and carry one off. Sometimes the Peregrine will condescend to make a meal off the Ring-Plovers and Purres upon the coast. Pigeons are often struck down and devoured. We have startled a Peregrine from a freshly-killed rabbit, but we do not think this bird bestows much attention upon ground-game.

Mr. Brodriek had a young Falcon, very white on the throat and breast, which had not quite passed through her first moult, showing that this whiteness is not the result of age. "She is a most powerfully built bird, as wide, I think, in the chest as was a Norway Gyrfalcon I stuffed a short time back" (W. B., *in litt.*). We conclude that the white-chested birds belong to a very fine race of Peregrines.

Wherever a pair of Peregrines and a pair of Ravens occupy the same cliffs, a constant warfare is waged between them, each finding the other powerful adversaries; and we have never known the Peregrines succeed in driving away the Ravens, or the Ravens the Peregrines.

Hobby. *Falco subbuteo*, Linn.

A summer migrant, but rather scarce. Breeds occasionally in the woods on the borders of Dartmoor.

This beautiful little Falcon, whose name, Mr. Howard Saunders informed us, is taken from Haut-bois, the high woods which it frequents, is a summer

* In the language of Falconry the male Peregrine is called a "Tiercel," and the female Peregrine a "Falcon."

visitor in small numbers to this country, and by some is believed to restrict itself almost to the same area as that chosen by the Nightingale. It is certainly extremely rare as far west as Cornwall; but in Devonshire, where the Nightingale is scarce, and in the southern part of the county especially, it frequently occurs, and may still nest occasionally in the large woods skirting the southern edges of Dartmoor. In North Devon we have known various examples brought to the Barnstaple bird-stuffer from time to time, and it has occurred on Lundy Island in the spring. For several summers in succession Hobbies nested in the romantic woods of Gidleigh Park, on the North Teign, where we often saw them flying above the trees, looking more like large Swallows than Hawks. The keeper was prevailed upon to spare them for some time on being assured that they were harmless to the game; but one unfortunate morning, happening to espy the three young birds seated together on a granite-boulder in the Park, he could not resist the temptation, and shot them all. We skinned these victims, which were remarkably large birds. This was at the beginning of August 1869. The following year we found the decaying remains of an old male Hobby hanging up in the keeper's "larder." To this senseless persecution by gamekeepers is due the diminishing numbers of this little Falcon.

An old Crow's nest is usually appropriated by the Hobby, and it is rather late in the season in rearing its young. Dragonflies, beetles, cockchafers, moths, bats, and small birds, especially Sky-Larks and Swallows, which are their favourite quarry, form their food, and they are slightly crepuscular, chasing insects late in the evening. Mr. J. Gatecombe wrote to Mr. Dresser:—"When out with my gun in the autumn, I observed a Hawk flying in circles, followed by a host of small birds. Suddenly it turned round, dashed out its foot, and caught one of them, still continuing, but widening its circle. I rushed forward and fired, when down came an adult female Hobby, dropping the little bird from its claws as it fell."

Col. Montagu writes:—"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 escaping the fatal blow."

In a manuscript notebook of 1798, which belonged to Col. Montagu, and to which we have before referred, it is stated that the Hobby had a nest near his house at Kingsbridge. Dr. E. Moore mentions Lydford Woods as a breeding-place on the authority of Mr. Newton, and Chebiton Wood on that of Mr. G. Leach (Rowe's *Peramb. Dartmoor*, 1st ed. p. 229), and Warleigh Woods, on the Tamar (*Mag. Nat. Hist.* 1837). There is a female Hobby in the A. M. M. which was killed on her nest at Brimpts, Dartmeet, July 12th, 1849 (R. C.). A pair nested in Gidleigh Park, near

Chagford, in the summer of 1869 (M. A. M., Zool. 1870, p. 2304). A nest and three young were obtained at Woodtown, near Horrabridge, in 1871 (J. B. R., MS. Notes). The Rev. T. Johnes, writing in 1832, speaks of the Hobby as not common, but states that it built in the tops of high trees in the woods near Bradstone (Bray's 'Tamar and Tavy,' i. p. 346).

At Plymouth, the Hobby has been observed as early as March (J. B. R., Trans. Plym. Inst. 1862-63, p. 51); and young birds have been seen in Bickleigh Vale up to the beginning of October (R. A. J., 'Naturalist,' 1851, p. 88). Mr. Bolitho had only two specimens brought to him in twenty years (1852-72). These occurred in May 1860 and July 1865, the last at Leigham. An adult was killed with a stone near Plymouth, August 30th, 1873; and a young bird was killed near there, October 1st, 1873 (Zool. 1873, p. 3720; 1874, p. 3829).

At Kingsbridge, Mr. Henry Nicholls had several specimens brought to him before 1865, but his brother, Mr. R. P. Nicholls, has not had one for a long time. Mr. W. Toll has killed examples near Strete, and it has been shot near Dartmouth (E. A. S. E.). We observed one near Stoke Fleming, July 2nd, 1891 (W. D'U.).

An old male killed near Torquay in 1850 is in the Museum of that town (A. von H. Zool. 1873, p. 3908). An immature male was shot Sept. 1st, 1874, at Yarnor Wood about two miles from Bovey Tracey (Trans. Devon. Assoc. viii. p. 257).

Several specimens have been killed near Exeter, but none recently. A young female September 5th, 1831 (R. S.); a male in 1846 (W. R. S., Zool. p. 2383); and a male taken in a net near the Double Locks on the Exeter Canal (R. C.); all these are in the A. M. M. Mr. W. Brodrick saw a Hobby on Dawlish Warren in the act of eating a Sky-Lark.

A male and female, in fine adult plumage, said to have been obtained in Devon, were in Mr. Byne's collection. The Hobby occasionally visits Lundy Island (Trans. Devon. Assoc. viii. p. 308).

The Hobby has occurred in the immediate neighbourhood of Taunton, and has nested in Stoke Wood; also on the Blagdon Hills, whence Mr. Cecil Smith received a young bird in the down in the summer of 1874, and kept it for a long time in his aviary, where it became a great pet.

In Dorsetshire, according to the Rev. O. Pickard-Cambridge, the Hobby used to nest regularly every year. In Cornwall it is not common.

Merlin. *Falco æsalon*, Tunstall.

[Little Blue Hawk.]

An autumn and winter visitor, but not of very frequent occurrence. Arrives generally about the middle of September, remaining sometimes as late as March.

Polwhele says that Mr. Elford saw several young taken from a nest on Roborough Down; but Dr. Leach thought the nest must have been that of a Hobby (E. M., Rowe's Peramb. Dartmoor, p. 232). The Merlin is said to have bred in Hound Tor Vale, near Manaton (W. W. B.).

This courageous little Falcon, a Peregrine in miniature, is, for the most part, only a winter visitor to the South of England, arriving about the time the Hobby is thinking of leaving us. It is by no means numerous in Devonshire, and occasionally a whole winter will pass without one being seen. Mr. W. Brodrick has observed Merlins on Exmoor in June, and there is a presumption that they may sometimes nest on the Forest; but if they

do, they all leave it before the stag-hunting begins there in the autumn, for Mr. James Turner has informed us that, in the many years he has followed the hounds across Exmoor, he has only once seen a Merlin. We were sitting on the Capstan Hill at Ilfracombe, early in August 1875, when a young Merlin flew close to us; it was too early for the northern birds to have arrived, and we thought that this young bird may have been reared on the high grounds at no great distance. We have seen Merlins in the winter-time, both in North Devon and in the close adjoining districts of West Somerset, and have admired their pluck and daring. One day we noticed a little cock Merlin in full pursuit of a Ring-Dove, which attempted to shelter in a big elm tree; but its pursuer dashed in after it, and rattled it out again, as readily as a cock Sparrow-Hawk plunges into a tangled brake after a blackbird.

In the old days of falconry the Merlin was trained chiefly for the use of ladies, and afforded pretty flights at Snipe, following them very cleverly through all their zigzag twistings. On the Irish bogs Merlins sometimes attend on the Snipe-shooters for the sake of getting a chance at the birds they may flush: and Lord Lilford has stated that, when shooting near the mouth of the Butrinto river, in Albania, he has seen as many as five wounded Snipe carried off in a single hour by these little Hawks.

In pursuing small birds Merlins fly low over the ground, and may be noticed, like Sparrow-Hawks, trying the sides of the hedges in search of their prey.

The Merlin places its nest upon the ground, and is common on the moors in the north of England, Scotland, and Ireland.

At Plymouth Politho had eight Merlins sent to him in twenty years (1853-73). They occurred at the following dates:—A male, November 2nd, 1852; October 13th, 1853; December 23rd, 1854; September 27th and November 22nd, 1855; January 22nd, 1858; November 2nd, 1860; October 17th, 1866. Mr. Gatecombe records one at Plymouth, February 3rd, 1873; two December 1878; one on Dartmoor, November 1879; a male at Plymouth, March 1884 (*Zool.* 1873, p. 3466; 1879, p. 115; 1880, p. 47; 1881, p. 57; 1885, p. 22).

The Merlin has often occurred in the Kingsbridge district. A pair in January 1852 (*C. P.*, *Zool.* 1852, p. 3474). An adult male, killed by flying against the telegraph-wires, October 1st, 1875 (*R. P. N.*). Two, December 1879, at Bolt Head ('Field,' Jan. 3rd, 1880). An immature male was shot when in pursuit of a Wheatear, September 18th, 1880, near Thurlestone. Two adult males at Gerston Copse, November 7th, 1885; a male December 2nd, 1886; and a female December 7th, 1886 (*E. A. S. E.*). Other specimens have been brought to Mr. R. P. Nicholls.

An immature bird shot at Paignton, and one at Bishop's Stowe, near Torquay, November 1872, are in the Torquay Museum. Two were seen, and one shot, at Chudleigh, about October 1875 (*E. A. S. E.*).

A female was taken in a net at Barley, near Exeter, September 6th, 1848 (*R. C.*). One at Exeter December 1849 ('Exeter Gazette'). One seen at Exmouth, and on Dawlish Warren, at the beginning of October 1873, was shot near Exeter on the 22nd of that month. A female shot at Newton St. Cyres, November 18th, 1880, is in A. M. M.

One was seen at Sidmouth in September 1866 (*J. C. Tyrwhitt-Drake*).

The Merlin is an occasional winter visitor to North Devon and Lundy Island.

In Cornwall it occurs about as frequently as it does in Devon. In Dorset it is only occasionally met with.

Red-footed Falcon. *Tinnunculus vespertinus* (Linn.).

An accidental visitor, of extremely rare occurrence.

The adult male of this small species presents a singular contrast of colours, the whole of the head, breast, back, and wings being of a blue-black; while the lower part of the body and the under tail-coverts are a rich chestnut-red, as are also the feathers covering the thighs, and the legs also are a rich red, giving the bird its English name. The female, too, is prettily marked, having the head and the whole of the neck and breast of a yellowish rufous, with an ash-grey back; and the young male resembles her for the first year. Thus, the birds in all stages of plumage are so distinct, that there is little likelihood of their being confounded with any of our smaller English Hawks. Besides, as this little Falcon is only a summer visitor to South and South-eastern Europe from Africa, it is not likely to be often met with in this kingdom, and its reported occurrences in Devonshire are not without suspicion. In the countries which it visits for nesting-purposes it is said sometimes to breed in small communities, and to be remarkably tame and fearless. It is almost exclusively insectivorous. When they first arrive at their summer-quarters, and again in October, before leaving for the south, these little Falcons are said to soar high in the air, numbers together, when they wheel round and round like Swifts, and, "fixing an imaginary point in the air, they will fly straight towards it, then return, and follow continually nearly the same route, never passing certain limits in their flight to and fro." These aerial performances are commenced in the afternoon and are continued through the night. (Dresser, 'Birds of Europe,' vol. vi. p. 98.)

Dr. E. Moore says "a fresh specimen was brought to Pincombe (a bird-stuffer at Devonport) by a sailor, and might have been caught in the Channel" (Mag. Nat. Hist., March 1837). This specimen is probably the one referred to by Bellamy (Nat. Hist. S. Devon, p. 199) as having been obtained in the Channel. Mr. J. Brooking Rowe says:—"There is a fine old male in Mr. Pincombe's collection, said to have been killed near Wembury; the female was observed, but not killed" (Trans. Plym. Inst. 1862-63, p. 51). Mr. E. H. Rodd states that, "when visiting Devonport in June 1863, I saw an adult male bird of this species in the hands of Mr. Pincombe, naturalist, of that town, which had been shot some time previously at Wembury Cliff, which is situated on the Devonshire side of Plymouth Sound. . . . This is the specimen referred to by Yarrell as having been in a museum at Devonport, and killed not far off. It is now in my collection" (Zool. 1863, p. 8678; 'Birds of Cornwall,' p. 9). It is more likely that Yarrell referred to the first of the birds mentioned above than to that killed at Wembury. These two males are probably those stated by Rev. F. O. Morris, on the authority of Rev. R. A. Julian, to have been procured near Plymouth ('British Birds,' i. p. 108). A female recorded as having been killed near Kingsbridge between 1840 and 1847 by Mr. H. Nicholls (Zool. 1847, p. 1695) was a Hobby! (R. P. N., *in litt.*). One of these Falcons *said* to have been killed in Devon was in Mr. Lyne's collection, which passed into the hands of Mr. Marsh-Dunn, of Teignmouth, where we saw it in 1883.

Curiously enough, some of the examples of this species which have been obtained in this country have occurred *in the winter*.

Two recorded by Dr. Bullmore as having been met with in W. Cornwall were shot, one of them on February 6th, 1851, and the other in the autumn

of 1867. Another we know of was shot at Fordingbridge, in the New Forest, in January 1877.

We know of no instance of the Red-footed Falcon in either Somerset or Dorset, but we have notes of three occurrences on the opposite side of the Bristol Channel, in Pembrokeshire.

Kestrel. *Tinnunculus alaudarius* (Gm.).

[Windfanner, Windhover, Criss Hawk, Crasset Hawk: *Dev.*]

Resident; generally distributed, and tolerably common. Its numbers are sometimes greatly increased in autumn, as in September 1873 (*J. G., Zool.* 1873, p. 378). It breeds on the cliffs in suitable places all along the sea-coasts of the county and in the sides of quarries. Some very small examples have come under the notice of Mr. Henry Nicholls at Kingsbridge (E. A. S. E.).

This beautiful little Falcon is the commonest of the Hawk family in our Western Counties. He may be seen everywhere. On the coast there is hardly a cliff without him. Inland he is equally numerous, and in any country walk or drive he may be met with, poised in the air and scanning the ground beneath him for a meal. Beetles of various kinds, especially the common dor-beetle, and mice, with an occasional small bird, form his usual diet, and we have seen him searching the dry grass, and plunging into it, after *tipule*, the "daddy long-legs." At the nesting-time the requirements of a small family make him more rapacious, and a Kestrel's nest then becomes a source of peril to any Pheasants' coops which may be near. Nearly all the young Pheasants at Gidleigh Park were carried off one season by Kestrels, which used to swoop so suddenly upon the coops that they would get away with their prey before the keeper, who was waiting in ambush, had a chance of a shot. But we believe that this is the only time of the year that Kestrels do any injury to the game-preserver. In hard weather we have seen Kestrels attack and kill Starlings, and, no doubt, at a season when their ordinary insect-food is scarce, they are driven to feed more largely on small birds. But in many that we have dissected, even in the winter-time, we have only found the elytra of dor-beetles in their gizzards. Mr. Gatecombe mentions that a slow-worm was found in the stomach of a Kestrel (*Zool.* 1887, p. 1376). The Kestrel is a very docile and entertaining pet in confinement. One we had for a long time was brought up in his infancy with a kitten for playmate, and many a game at hide-and-seek did they have together on our lawn, pouncing out on one another from behind the geraniums in the flower-beds. When wearied with their sport they would generally be found sleeping side by side*. When

* Their favourite resting-place was provided by the ladder going up into the hay-loft; on one of the steps would be the Hawk, and the cat would be found on the step either immediately above or below. One morning we observed an old tom cat of the establishment occupying an upper step; just under him sat the Kestrel; beneath again was the cat who was his special friend and playmate; and with his hind legs resting on the ground, and his fore feet placed on the same rung on which this last cat was asleep, was "Toby," the pet terrier, who regarded the Kestrel and the cats with a devoted friendship.

the Kestrel had obtained his full powers of flight he would fly across our meadow from a tall elm directly we appeared in the morning, settling on our shoulder, and always had a lot to scream about. Whenever he saw the plants in the conservatory being watered he would fly in at one of the windows, and alighting on the pavement, and fluttering his wings, would beg to be drenched, and delighted in the shower-bath given him. Sometimes a strange Kestrel visited our tame bird, and the two would fly off together; but our pet always returned.

Mr. Gatcombe has recorded the nesting of a pair of Kestrels which were kept in a very small cage at Plymouth, only 4 ft. long and 4 ft. high by 2 ft. broad; five young ones were duly hatched, not all at once, but every alternate day; and as each new chick appeared, the hen Kestrel immediately killed and devoured the one hatched before it, until the whole brood was destroyed.

The nest of the Kestrel is placed in a tree, an old Crow's nest being often occupied; the crannies on the cliffs offer a favourite site; ruins and lime-kilns are not unfrequently selected as breeding-places; and Mr. James Turner, of Staplegrove, Taunton, told us of a pair of Kestrels which nested for several years in an old barrel which he had placed in an elm for Jackdaws to build in: the barrel was divided into two partitions; one of them was tenanted by the Kestrels, and the other by a pair of Jackdaws.

In September 1871 a vessel was coming up the English Channel, and the crew saw a female Kestrel chasing a young Barn-Owl for several miles out at sea. At length, becoming tired, both birds alighted on the vessel and were captured. They were afterwards brought to a bird-stuffer in Exeter, by whom they were shown to us.

Obs.—The Lesser Kestrel (*Falco cenchris*, Naum.), a much smaller bird than our Kestrel, and a native of the extreme south of Europe, has probably been once obtained in Cornwall, as Mr. E. H. Rodd examined a remarkably small female Kestrel, which was shot in the western part of his county, and sent a description of it at the time to the 'Zoologist' (1876, p. 5178); and only this last winter (1890) two examples have been obtained in Ireland, and another occurred on the Scilly Isles in March of this present year (1891).

Osprey. *Pandion haliaëtus* (Linn.).

A casual visitor, formerly of occasional occurrence in the estuaries of the larger rivers of the county, at all seasons of the year, but principally in spring and autumn. Polwhele says that about forty years before he wrote (1797) a single pair of Ospreys bred on a pinnacle of the cliffs at Beer every year, arriving in April and leaving in August. The Osprey was called in that neighbourhood a "Herriot," and the rock this pair built on was known as "Herriot Hill." He also speaks of this bird as breeding on the cliffs of North Devon (Hist. Devon, vol. i. chap. 6). Less than fifty years ago Ospreys were still nesting, or attempting to nest, in several places in the S.W. counties, but were shot down, sharing in the common fate ruthlessly apportioned to many of our most interesting birds. Mr. W. D. Crotch informed Mr. A. G. More, who drew up a most

useful paper for the 'Ibis' on the distribution of our British Birds during the nesting-season (*cf.* Ibis, 1865, p. 9), that as recently, comparatively, as 1847, a pair of Ospreys attempted to nest at Monksilver, in West Somerset, but that the keeper shot these unfortunate birds while making their nest! Then we have been informed by the Rev. H. G. Heaven, of Lundy Island, that since his father bought the island in 1835, the Osprey has had an eyrie there at Gannet's Combe. The birds last bred there in 1838. In that year the male was killed by one of the Channel pilots, who from time to time have dealt great havoc to the Lundy birds, and the female never returned, probably having been shot elsewhere, or she would certainly have found another mate, and would have appeared again on the familiar cliff. The Osprey, in its autumn migrations, used to favour Devonshire more than any other part of the kingdom. There is not an estuary on which numerous examples have not been procured. It is not met with on the upper parts of the Bristol Channel, where the waters are still opaque, but has been noticed wherever the tideway is clear enough for it to pursue its fishing. It sometimes occurs inland where there are sheets of ornamental water, such as the fine lakes in Sandhill Park and Cothelestone Park in our old parish of Bishop's Lydeard, under the beautiful Quantock* Hills in W. Somerset. On the North Devon rivers, although there are many instances of its occurrence, the Osprey was never, we think, so plentiful as it used to be at the mouth of the Exe, and on other estuaries in the south of the county. Although generally confined in its appearances to the autumn months, we have known cases in which the Osprey has been met with in the summer. Thus, the keeper at Lord Devon's beautiful seat, Powderham Castle, in June 1869, noticing that a large Hawk was carrying off his young pheasants, set a trap and caught a fine Osprey. When the bird was in the gin the valiant keeper was afraid to approach it until he had first well-nigh blown it to pieces with his gun. Our friend Mr. W. Brodrick, then residing at Chudleigh, was only able to preserve the head and feet, which he kept as memorials. The finest specimen of the Osprey we have ever seen is one which was shot at Slapton Ley by Mr. Michelmore, on October 27th, 1863. It is a very beautiful adult, and was admirably set up by Mr. H. Nicholls, of Kingsbridge, and we considered it quite the gem of his very interesting collection of birds.

The indefatigable Mr. J. Wolley (*cf.* Professor Newton's 'Ootheca Wolleyana') has given a good account of the singular nest constructed by the Osprey, which he says in its shape not a little resembles the great nests of the wood-ant, or, as we may venture to suggest, the nest of the Flamingo. The favourite site is a pointed rock, ruin, or tall fir, on an island in a loch. The nest, he writes, "is usually in the form of a cone cut off at the top; the sticks project very slightly beyond the sides, and

* It may be worth while to state that a friend who is a great Welsh scholar has assured us that Quantock means "full of Owls," being derived from the Welsh "Cuan," "an Owl," and the termination "og" = "full of." No doubt Owls were once very numerous in the thick woods which covered the sides of these hills.

are built up with turf and other compact materials; the summit is of moss, very flat and even; and the cavity occupies a comparatively small part of it. I know no other nest at all like it." The eggs of the Osprey are greatly prized by collectors, as they are among the most beautiful, and most varied in their markings, of all the eggs produced by the Falconidæ.

The cry of the Osprey is said to be very musical. It flies with slow and heavy beats, occasionally sailing along with motionless wings like a Kite. "Ospreys are very constant, year after year, in returning to their old stations; and even after one or both birds have been killed in the previous season, I have frequently seen individuals flying near the now deserted eyrie" ('*Ootheca Wolleyana*', p. 58).

Col. Montagu states that an Osprey was seen to swoop down and carry off a young wild Duck on Slapton Ley. "The Duck, by struggling, fell from the talons of the Eagle, but was again recovered before it reached the water." The Osprey poises itself, like the Kestrel, while examining a place below for food, as Col. Montagu has described. "As we were crossing the bridge over the river Avon, at Aveton Gifford, on 9th 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."

Montagu considered the Osprey to be more common in Devonshire than in any other part of the kingdom, and in an annotated copy of his '*Ornithological Dictionary*,' now in the Library of the Linnean Society, he has recorded the following instances of its occurrence:—"Male Osprey killed at Aveton Gifford, 18th July, 1805; another 4th November, 1806, at same place; another at the mouth of the Teign, September 1808, and several others seen. One seen to carry off a half-grown wild Duck at Slapton Ley. One at Slapton 11th October, 1809, fed plentifully on perch." The same excellent ornithologist observed one hawking for fish on the river Avon from Aveton Gifford Bridge, 9th April, 1811, and gives an interesting description of its habits (*Mont. Orn. Dict.*, Suppl.). Dr. E. Moore mentions specimens obtained at Estover in May 1831 (two); another in September 1831; two on the Avon (Rowe's *Peramb. Dartmoor*, p. 229). He had accounts of others having been killed or seen in April, May, July, September, October, and November (*Mag. Nat. Hist.* 1837).

Twenty at least occurred in the county between 1840 and 1875, as recorded in the '*Zoologist*' and other periodicals. Bolitho, of Plymouth, does not appear, however, to have received my to mount. Quite a flight seems to have visited Devonshire in the autumn of 1875, when Ospreys were killed on the Teign, Dart, Avon, Tamar, and Taw (*J. G., Zool.* 1875, p. 4718). Since that year none have occurred in the county within our knowledge.

In 1841 a female was shot by Mr. Davis, of Halwell, on the Kingsbridge estuary. Another female was shot by the gamekeeper of the Rev. Kerr Vaughan on September 3rd, 1844, between the old and new Loddiswell Bridges. Its weight was 3lb. 10 oz.; extent of wing 5 ft. 6 in., and its stomach contained the remains of a fine trout. This bird is now in the collection of the late Mr. J. Elliot, at Kingsbridge (H. N., *MS. Notes*). One was seen on the Erme for a fortnight in October 1851 ('*Naturalist*,'

1852, p. 7). One was observed fishing for perch and roach at Slapton Ley for several days, and was at last shot by Mr. J. Michelmore, who left it where it dropped. It was eventually picked up by Mr. John Goodwin, from whom it was obtained by Mr. Henry Nicholls, in whose collection it now remains (H. N., Zool. 1864, p. 9039; and MS. Notes). In 1875 one frequented the Avon, and three were seen at Millbrook, just opposite Devonport, and one was shot (J. G., Zool. 1875, p. 4719). One was seen on the Dart, December 7th, 1874 (G. F. M., Zool. 1875, p. 4329); and one was killed there September 1875 (E. P., Trans. Devon. Assoc. vol. viii. p. 257). One was obtained on the Teign in 1875 (T. Jacobs and C. S., *v. v.*).

The Osprey was frequently seen on the Exe, and one was observed for a month in September 1845 (F. W. L. R., Zool. 1845, p. 1190). Dr. W. R. Scott remarks that this bird was not a very uncommon visitor, as almost every winter one or two were shot in the neighbourhood of Exeter. One was shot on the Exe, December 1847 (Zool. 1849, p. 2384). The specimen in Mr. Byne's collection was shot on the Exe estuary October 4th, 1865, and was seen by us on the previous day, perched on a beacon-pole stuck in the mud between Topsham and Turf (W. S. M. D'U., Zool. 1865, p. 9847). One was wounded on Dawlish Warren in October 1866. One was trapped at Powderham, on the Exe estuary, in June 1869, having been feeding on young Pheasants. Another was shot on Dawlish Warren, April 27th, 1871.

One occurred on Braunton Marshes, September 1868 (G. F. M., Zool. 1868, p. 1460). Mr. Cecil Smith mentions one from North Devon, about September 1869 (B. of Somerset, p. 4, note). Two were observed, and one killed, in the neighbourhood of Barnstaple in September 1875 (M. A. M., Zool. 1875, p. 4720). The Osprey is an occasional visitor to Lundy Island (Trans. D. Assoc. iv. and viii.).

The Osprey used to be met with very frequently on the Cornish estuaries, but, alas! both in Cornwall and Devon, at the present time, it is very rarely seen. On the coast of Dorset it was not unfrequent up to 1881.

Order STEGANOPODES.

Family PELECANIDÆ.

THE CORMORANTS.

The next family of birds we have to consider may be termed Aquatic Birds of Prey, being as eminently fitted for the pursuit of fishes under water as the Accipitres are for the capture of birds in the air, or small animals on the surface of the land. Some of them rival the Eagles and Falcons in power of flight (the Frigate Birds of tropical oceans even surpassing them), and the splendid dash of the Gannet on its finny prey reminds one of the Osprey; but whereas the latter seizes a fish with its powerful talons, the Gannet, being web-footed, can only do so with

its bill. The Steganopodes, or totipalmate birds, include, besides the Gannets and Cormorants (of which we have representatives in our Ornis), the Pelicans, the Frigate and Tropic Birds, and the curious slender-necked Darters, and in all these the whole of the toes, including the hind one, are webbed, a structure not met with elsewhere amongst birds, so that they form, on this account, a well-marked and natural order.

The Cormorant and the Shag must be well-known birds to people residing on or visiting the sea-coast, where strings of their dark-looking and long-necked forms will be often noticed speeding with rapid flight over the surface of the sea not far from the cliffs, and, occasionally alighting, commencing to dive for fish beneath the waves. But when hidden from view they are chasing their finny prey with their wings, and are flying as much below the water, and almost with the same degree of swiftness, as when threading their path through the air. It is owing to this power which they possess that they are so expert in capturing fish; the Cormorant, in particular, is greatly to be dreaded when it ascends the streams after freshwater fish, as nothing can escape it, as it flies under water in pursuit faster than the trout can swim, and follows them into their hovers. As is well known, Cormorants are commonly trained so as to make them serviceable in catching fish; they become singularly docile, returning always to their masters with their captures, and a ring fitted round their throat prevents them from appropriating their spoil should they feel inclined to do so. The Gannet, another expert fisherman, and a powerful and singular-looking bird, captures his fish after another fashion. Poising himself in the air above any school of fish his keen eyes may have detected, suddenly his gleaming white form may be seen to descend with great

velocity into the water, which splashes up round the momentarily submerged bird, and the next second he will reappear flying up with his captured prey. This may be often witnessed off our Devonshire coast, especially on Torbay, where Gannets are sometimes very numerous. The upright figures of Cormorants or Shags, sitting on the rocks at the base of the cliffs, are a common and characteristic sight upon the coast. Sometimes long lines of these birds may be seen standing motionless, facing the wind, on the banks of sand laid bare at low-water, each bird having its wings raised as though to admit the air to the feathers on the sides and to dry their plumage. We have seen Turkey-Buzzards sitting on the branches of dead Evergreen or "Live" Oaks in California on foggy mornings in exactly the same attitude.

Cormorant. *Phalacrocorax carbo* (Linn.).

[Shag, Isle-of-Wight Parson (*Eve*).]

Resident and numerous on all our coasts, and in the estuaries of all our large rivers.

Cormorants ascend the valley of the Exe considerably above Exeter, and follow the course of streams inland in pursuit of eels and other freshwater fishes. They breed on the cliffs along the sea-coast both in North and South Devon, but some of their breeding-places, having become too accessible to egg-collectors, have been abandoned. The Cormorant is not a bird beloved by the angler, who often sees this poacher, either singly or in small parties, flying up the course of a stream to take toll of the trout. When there are two or three of them, one will generally be found on the top of a tall tree near the water acting as sentinel, while the others are fishing. We have sometimes come upon a Cormorant so gorged with trout as to be unable to fly. The bird will then make some diabolical noises, and ejecting his fish, will rise heavily on wing. We surprised three Cormorants one day fishing in a pool left by the tide on the Barnstaple river, where they had been feasting "not wisely, but too well," on grey mullet, the consequence being that on our approach they could only dive into the water, and became our easy prey. Not knowing what to do with the three heavy birds, when we had them on the sand, we went up to a labourer, who was working in a field at no great distance, and offered to present them to him. He at once accepted

them with great delight, assuring us that after they had been buried a little time in the earth they would be as good as Turkeys!

Like most sea-fowl, if skinned and soaked for a night in milk-and-water, a Cormorant is by no means bad eating, and we have known an old lady to much appreciate a "Black Goose" as she called it. A younger lady, accustomed to game, who partook of one, declared it tasted so like Grouse that she would not have known the difference but for its size. When any of the sailors on the North Devon coast shoot Cormorants or Shags, they carry them from house to house endeavouring to sell them as "Muscovy Ducks"!

The Cormorant is a common bird on the northern and southern coasts of Devon, and there are a few stations where the birds may be seen in considerable numbers. One such station is on a high cliff in Ladram Bay between the mouth of the Otter and Sidmouth, which we visited one day, and, lying down on the top and looking over, beheld a great assemblage of Cormorants on the ledges close below. Some were preening their feathers, some were quarrelling, some were asleep. After watching them for some time a friend with us fired a rifle, when great was the commotion and rustling of wings as the birds, a hundred or more, left their ledges and flew out over the sea. We have seen eighteen sitting together on the top of the Clerk Rock between Dawlish and Teignmouth. The strong smell arising from a nesting-station of Cormorants is perceptible at some distance. Cormorants are often caught in the fishermen's nets, especially the young birds, which are white-breasted, and these are believed by the fishermen to be a different species, and specimens have been forwarded to us as great rarities. Although, as a rule, nesting on the cliffs, Cormorants not unfrequently place their great nests on trees. We know of an instance in Pembrokeshire, where a number nest annually in a wood at Slebech, the seat of Baron de Rützen. Cormorants have been seen perched on the spire of a church in Barnstaple.

On the 15th June, 1883, when in company with Messrs. J. Gatcombe and J. Brooking Rowe, at Wembury, near Plymouth, we saw a Cormorant with a conspicuous white collar around the neck (*Zool.* 1883, p. 422). We watched it for some time through a powerful field-glass. Mr. Gatcombe mentions that in April 1877 he saw on the rocks at Wembury "a Cormorant in rather peculiar plumage: the whole of the lower parts, from the chin downwards, was almost white, and the back and wings apparently silvery grey." It is remarkable that Mr. Clogg had seen a similar bird on the Cornish coast a few months previously, and Mr. J. C. Mansel-Pleydell observed one like it in Swanage Bay on the 23rd June following. It would seem that this peculiarly marked bird had been making a tour round the coast.

Shag. *Phalacrocorax graculus* (Linn.).[Green Cormorant; Crested Cormorant; Shoalster (*N.D.*.)]

Resident on the coasts, and breeds.

The Shag or Crested Cormorant is a common bird on the Devonshire coasts, and is, we believe, more numerous than the Cormorant in some parts. It does not visit the inland streams like that bird, although it will ascend tidal rivers as far as the tide runs, being often seen as high up as Barnstaple, which is some six miles above the mouth of the Taw. It nests on the cliffs of the north and south-west coasts. The adult bird in its dark green plumage in the early spring, and with its conspicuous crest, is very handsome, although, to our eye, there is something "uncanny" in the appearance both of the Shag and the Cormorant, as Milton doubtless thought when he selected the Cormorant as the bird whose form he represents the great Enemy of mankind as assuming. The Shag is an extremely wary bird, and does not often become the spoil of the gunner, and its compact feathers are almost like a coat of mail. An Instow boatman, who in by-gone years was our companion when we went after Duck, had many marvellous tales to tell of this invulnerable bird. One day he got near one as it was sitting asleep and drying its feathers in the sun, after the manner of Shags, on a sandbank. He shot it, picked it up, and tossed it into his boat, and a short time afterwards landed to crawl over the mud with his long duck-gun after a flock of Wigeon. When he was some distance away he turned round and looked towards his boat, and there, he declared, was his supposed dead Shag seated on the gunwale, shaking the shot out of its feathers, so that he could hear them rattling on the water, and the next thing he saw was the Shag flying cheerfully away! We have seen great numbers of Shags on Torbay in October: one of the rocky islands a little distance from the shore is a great roosting-place; this a friend of ours once rowed out to in the dark, and, firing at random towards the rock, slaughtered a great many of the birds.

On the south coast the Shag is not so numerous as the Cormorant to the east of Torbay; but to the west it is even more abundant, and appears to have increased in numbers near Plymouth, where it was extraordinarily numerous in January 1873 (*J. G., Zool.* 1872, p. 2985; 1873, p. 3397; 1879, p. 205). It is not seen in the harbours near that place before the beginning of the usual November gales (*J. G., Zool.* 1874, p. 4254). Shags breed in large numbers about the Bolt Head and Hope early in May, and Mr. E. A. S. Elliot found many sitting on their nests, and their mates around them, on the rocks between the Bolt Head and Bolt Tail in May 1889, but they had then lost their crests. The males are considerably heavier than the females (*R. P. N. and E. A. S. E., MS. Notes*). Shags are sometimes numerous after gales at Teignmouth (*H. S., Zool.* p. 6794), and are occasionally driven inland by stormy weather. They rarely ascend the estuary of the Exe, but we saw one in January 1871 which had been killed near Woodbury. One was killed on the Kingsbridge estuary in full breeding-plumage in February 1875 (*J. G., Zool.* 1875, p. 4450). Many breed on the north coast and on Lundy Island.

Gannet. *Sula bassana* (Linn.).[Solan Goose; Channel Goose (*N. D.*.)]

Resident, being always to be found off some part of the coasts, at a longer or shorter distance from land.

Lundy Island is the only breeding-station of the Gannet off the S.W. coasts, and the modern history of this interesting bird in this its ancient haunt is a sad tale of persecution. Formerly the birds occupied a rocky island at a short distance from the northern end of Lundy, which goes by the name of the Gannet Rock; but here they were so constantly harried by the Channel pilots that they shifted their quarters to another station on Lundy itself, where unfortunately the cliffs are not sufficiently precipitous to prevent their nests being plundered by the egg-stealer. Mr. Wright, the tenant of Lundy, informs us that he does not think a single young bird has been reared during the last seven years! The eggs are systematically taken, finding a ready sale at 1s. each to tourists and others. We are told that the number of nests, when they were counted the season before last, was about seventy. But it is very evident that the birds will not long endure such a cruel and senseless persecution, and any day we should not be surprised to hear that they have finally left a spot where they can secure no peace. At the time when they were driven from the Gannet Rock a few pairs migrated to Grassholm, a small island off the west coast of Pembrokeshire, and here they flourished greatly and rapidly increased in numbers, as our friend Mr. Mortimer Propert, of St. Davids, who visited Grassholm in 1886, calculated there were then at least 250 nests in four distinct colonies. On this remote island the Gannets resided in comparative safety until three years ago, when a party landed one day from a gunboat, and committed a wanton massacre of many of the old birds, and amused themselves by throwing the eggs into the sea! We are glad to add that justice reached the perpetrators of this senseless act, and we trust the Grassholm Gannets will be left alone for the future. Little parties of Gannets may be seen passing up and down the Channel off the Ilfracombe coast in the autumn and winter, and on Torbay we have seen great numbers in October. The boatmen at Torquay have a custom of capturing them in a cruel way, by fastening a herring to a deal plank and then placing it on the water, and presently, the bait being espied by a passing Gannet, the bird plunges itself downwards with great force, and driving its beak into the soft wood is held a fast prisoner until the boatmen come up and secure it.

We once had a Gannet brought to us alive in December which had swallowed a baited fish-hook, and it proved a very formidable pet, as it made vigorous stabs at all who approached with its powerful beak. We know of no instances of Gannets coming up the tidal rivers, even after the severest storms, although there are many cases of immature birds having been picked up dead far inland.

The old Gannets in their full nesting-plumage, when they have their straw-coloured heads, bright blue patch of skin around the eyes, pure

white backs and underparts, with black tips to their wings and blue lines down the toes, are very handsome, and do not attain their full dress until the sixth year. Young birds are grey; and year after year become gradually whiter. There is a certain stage when they assume a curious plumage marked upon the mantle in alternate squares of black and white, like a chess-board. Where they go to when they are in this stage of plumage we cannot well say, as they are then extremely rare and are seldom met with, even off such a great metropolis of Gannets as the Bass Rock at the entrance of the Firth of Forth. In the winter-time old birds lose a good deal of the straw-yellow upon the head, which is then almost white. Gannets are common off the Cornish coast during the autumn and winter, following the pilchards into the bays, but have no nesting-places on any of the cliffs or on the Scilly Islands.

Two nestling birds in the A. M. M. are *said* to have been taken from the cliffs between Exmouth and Budleigh Salterton not later than 1861, but there is now no breeding-place on the south coast of the county. Immature birds seem to be generally rare at all seasons on the south coast (A. von H., Zool. 1874, p. 3906; J. G., Zool. 1878, p. 53, and 1887, p. 377); but the adults are very common, and appear to remain for the greater portion of the year, viz. from September to May. They, however, usually keep well out at sea, except when following shoals of pilchards, herrings, and sprats, then approaching the shore in large numbers, and may be seen dashing into the water after their finny prey. Adults are often brought to the bird-stuffers at Exeter and Exmouth in January and February. An immature bird in its dark grey white-spotted plumage was killed off Exmouth after the stormy weather in October 1891; and five or six occurred on the Kingsbridge estuary about the same time. They were picked up in an exhausted and dying condition. At Plymouth Gannets are frequently brought in by the fishermen during the early months of the year, being captured either by baited hooks or by becoming entangled in the herring-nets off that port (J. G., Zool. 1879, p. 206).

We remember seeing many years ago amongst the papers of Col. Montagu, kindly lent to us by our friend the late Rev. J. Hellins, of Exeter, figures and description of a mite named by him *Cellularia bassani*, which he discovered living in the air-cells under the skin of the Gannet.

Order HERODIONES.

Family ARDEIDÆ.

THE HERONS.

We have eleven representatives of the Heron family on the British list, but, of the whole number, only two are to be considered as indigenous birds—the Common Heron, still numerous in suitable localities, and the Common Bittern, once a resident, but now only seen in severe winters as a frozen-out migrant. All the others are only accidental stragglers, some of them South-European species, such as the Purple Heron, the Little Egret, the Buff-backed and the Squacco Heron, the Little Bittern, and the Night-Heron; while there are two others which have reached us from America, coming perhaps *viâ* Northern Asia and Europe, namely the American Bittern and the Green Heron, the last having only once been obtained on the West Cornish coast, its first recorded appearance anywhere in Europe. All these birds are denizens of dense sedge-covered swamps and morasses, where they nest, some of them on the ground, others on trees growing in the bogs; they are all more or less nocturnal in their habits, feeding on frogs, fish, worms, &c.; some are extremely beautiful, being adorned with dorsal and breast plumes and crests; but their appearance in this country is exceptional, and some of the recorded instances may either have been escapes of imported birds, or they may have reached our shores through an assisted passage, having alighted when weary on the rigging of ships and so have been carried into our latitudes. With the

exception of the Green Heron, every British species has been reported from Devonshire, only one of them being doubtful.

Heron. *Ardea cinerea*, Linn.

[Herne, Erne, Crane: *Dev.*; Heronshaw.]

Resident, and tolerably numerous, but rather local in its distribution. Frequents the estuaries of our larger rivers, inland ponds and streams, and occasionally the bogs on Dartmoor. Breeds in March and April in the breeding-stations, or heronries (termed "craneries" in South Devon, Herons being often called "Cranes"), in various parts of the county, of which we append a list. These are seldom very far from the sea-coast, as the birds instinctively select their home within an easy flight of localities where their food may be obtained with the greatest ease and safety.

The favourite quarry of the old falconers, because of the courage with which it would climb the heavens in a ringing flight—*ardea petit ardua*—in its efforts to shake off the pursuing Falcons, and for this reason in old times a bird for whose preservation the game-laws were strictly enforced. The Grey Heron, or "Heronshaw," as it was anciently termed, is still fairly numerous in most parts of the county, in spite of the annual decrease in the area of fen-lands and the removal of that special protection to which we have referred: nor is it likely ever to become a rare bird, for it is so wary that it is well able to take care of itself, and the brooks and sands afford it plenty of food.

On the sands in the estuary of the Teign in South Devon we have counted as many as thirty at one time feeding at low-water, and the late Mr. Gatcombe observed a similar number on the mudbanks of the River Tamar, near Warleigh, on 4th November, 1876. Herons are equally plentiful along the beautiful banks of the Dart, and on the Kingsbridge estuary, as also on the sandy reaches of the Taw and Torridge, and are numerous on the shores of the Bristol Channel from Minehead eastwards. On the Exe estuary thirteen is the largest number we have seen at one time.

Often of a summer's evening the harsh cry of the Heron may be heard as he passes overhead with heavy beat of wing on his way to some brook, where, after a long-continued drought, the poaching fellow does considerable mischief among the fish, and, if there be a moon, pursues his sport all through the night. Besides small fish and eels he eagerly devours frogs, water-voles, mice, and rats. When fly-fishing we have sometimes come close upon a Heron napping after a hearty meal of trout or frogs, and once succeeded in getting our line round the neck of one extra somnolent, but after a struggle or two, fearing for our top-joint, we let the bird go free.

Young Herons are by no means to be despised for the table, their

brown meat closely resembling that of a hare in flavour. A Heron, when fishing, is a model of patience. See him, standing in the water, motionless as if asleep, remaining in the same attitude until at last some fish has approached within his reach, when down comes the formidable beak with lightning rapidity and rarely misses its prey. A wounded Heron should be approached with caution, as the bird can strike very smartly and, invariably, if he can, aims at the eye. In severe weather we have come across frozen-out Herons so weak and starved that they have allowed us to capture them with the hand. Such we have taken home and carefully nursed, feeding them with raw meat, &c., but after a few days we have always found them dead. Before beginning his evening's fishing a Heron likes to settle on a tree near the water, where he will remain for some time in meditation. Two small fishponds on our grounds were much affected by Herons; one of them was bordered on one side by old oaks, on which the birds loved to settle, and the other was a favourite haunt because of the multitude of frogs which inhabited its shallows. Here of an evening we have counted seven Herons either meditating or busily engaged in fishing. A few years since, after a severe gale, a Heron was caught at Ilfracombe and brought alive to Mr. W. Brodrick, then residing there. He turned it into a yard which was tenanted by a fine Gordon setter, between whom and the bird a warm friendship was at once established. The dog allowed the Heron to pick the choicest bits out of his food-bucket; and we have seen the bird standing as close as it could get to its friend, its beak resting affectionately on the dog's forehead. But one morning the Heron was found choking from a bone which had lodged in its gullet, and, although tracheotomy was successfully performed, and the bone removed, the Heron died the next day, to the great grief of Chuff, the setter.

West Country Heronries.

- Shute Park, near Axminster, the seat of the Poles, established a few years before 1852 (G. P. R. P., 'Naturalist,' 1852, p. 35). The birds are stated to have removed to Stedcombe (*id.*, 'Book of the Axe,' p. 770).
- Killerton, near Exeter (Sir T. D. Acland, Bart.), on beeches near the house (Henry Burney, Zool. 1873, p. 3651, and R. C., *v.v.*).
- Powderham Park (Lord Devon), on the estuary of the Exe, on oak trees.
- Sharpham, on the Dart, the seat of the Durants, about twenty nests.
- Bellever, on Dartmoor (Mr. Templer), on larch trees (W. W. B., *in litt.*).
- Totnes, single pairs in the woods (S. Hannaford).
- Halwell Wood (Capt. Hallifax), on the Kingsbridge estuary. More than thirty nests there in April 1881 (E. A. S. E.).
- Woods opposite Ilton Castle, also on the Kingsbridge estuary, on low fir trees (*id.*).
- Aunemouth, on the Avon, in small numbers (*id.*).
- Little Orchard Wood, at the mouth of the Erme (Rev. G. C. Green, Pidsley's B. of Devonshire).
- Warleigh, on the Tamar, the seat of the Radcliffe family.

Kitley, near Yealmpton, the beautiful seat of the Bastards.

Fremington, near Barnstaple, on the Yeo property, in a fir-plantation.

Arlington Court (Miss Chichester), near Barnstaple.

Pixton Park, near Dulverton (Lord Carnarvon), on fir trees. This heronry was formerly situated at Combe House, an ancient seat of the Sydenham family in the Parish of Dulverton; from thence the birds migrated to some woods on the Exe, on the eastern side of Pixton, but by successive moves approached nearer to their ancient home. There were about ten pairs building in fir trees about 1872 (J. E. Harting, *Zool.* 1872). This year (1891) we regret to say that the trees at Pixton have been wholly, or in part, cut down.

There was formerly a colony near Dawlish, but it no longer exists (Harting, *Zool.* 1872, p. 3261). There seems also to have been a herony on the Teign (T. & K., 1830).

There are at least four heronries in Cornwall, and several in Somerset, besides the one we have mentioned above at Pixton Park, and one at Knole, not far from Minehead. The latter is one of the most picturesque heronries we know of. Here there is a cone-shaped wooded hill, on which almost every tree bears one or more nests; and when the birds are either sitting, or are in close attendance upon their young, the heronry may be seen from a considerable distance, and shines silver-grey in the sunlight to anyone looking down upon it from the superior heights of Dunkery. There are only two or three heronries in Dorset.

Mr. E. A. S. Elliot writes that on April 26th, 1881, having permission from the owner, Capt. Halifax, he went to Halwell Wood by himself, and soon found the Herons established on the south-west border of the wood in low, bushy oak trees, no nest being more than forty feet from the ground. The trees were easily climbed, and he was soon up the nearest tree with a nest; but was more cautious after his first experience, as it contained nearly full-fledged young, which resented his intrusion by darting their pointed bills at him with startling force and rapidity. The old birds cleared out, and did not attempt to defend their nests, but the young ones were very fierce. He went up to quite thirty nests, most of which contained young in different stages of growth, and took seven eggs from nests where he guessed the eggs would not be hard-set from the fact of their containing only two or three. In some nests he found but two young, and in others four. We have known a case where a lad has had his hand perforated by the bill of one of the old herons as he was coming down from a tree after robbing the nest.

Heronry are somewhat hard to kill; we once stalked one fishing on the edge of the mud near Powderham, on the Exe, and having fired at him from behind a marsh-bank with a heavy duck-gun, knocked him so completely head-over-heels into the water that he came up facing the opposite direction to that in which he had been standing. Wishing to secure our prize we ran down to the water's edge without stopping to reload, but just as we reached the Heron, and were about to pick him up, he opened his broad wings, and rising into the air, sailed away apparently uninjured.

Purple Heron. *Ardea purpurea*, Linn.

[The African Heron of Montagu.]

An accidental visitor of very rare occurrence.

A more showy looking bird than the Common Heron from its bright maroon-red breast, which gives it its English name, the Purple Heron is a bird of Southern Europe, and is only an occasional straggler to the north of the Continent, and, as such, is no more than a very rare accidental visitor to the British Islands. Although in appearance closely resembling the Common Heron, than which it is, however, a trifle smaller, this Heron in its habits comes nearer to the Bittern. Like that bird it delights in skulking in deep sedges, and may thus be more easily approached, flushed, and shot than the Common Heron, which generally feeds on some open level where it can at any moment descry an approaching enemy. The Common Heron, as is well known, places its nest in trees, and sometimes on the ledges of cliffs, whereas the Purple Heron nests upon the ground. "When resting and dozing during the daytime it sits in a most peculiar position, in which it may be compared to an old pointed brown post sticking in the ground. It sits mainly on its hinder quarters, resting on these and the hinder part of the tarsus (not on the foot); and the body and neck are stuck in an almost upright position" (Dresser, 'Birds of Europe,' vi. p. 222). The full plumage is not assumed until the bird is three years old.

Three or four specimens, all in immature plumage, are reported to have been obtained, and two others seen, in South-western Devon. Three of them are mentioned by Dr. Edward Moore. One of them was seen on the Plym in April 1824 by Mr. T. E. Gosling, of Leigham, and another by several persons near Flete, on the Erme, the residence of the Bultceels, in December 1836. It is natural to surmise that both these birds might have been Common Herons. The third was shot near Aveton Gifford, and was sold at the Rev. Kerr Vaughan's sale in March 1847, and is now in the possession of Mrs. Elliot of Tresillian House, Kingsbridge, having been purchased by her husband the late Mr. J. Elliot. This specimen was forwarded to Bewick, and figured by him (E. M., Trans. Plym. Inst. 1830; Mag. Nat. Hist. 1837; Rowe's Peramb. Dartmoor, 1848; E. A. S. E., MS. Notes). The Rev. Thomas Johnes mentions that in January 1832 a waggoner, passing over Whitchurch Down, saw a large bird rise from the roadside close to him. He struck it down with his whip, and it was presented to Mr. Johnes by Mr. C. Willesford, of Tavistock. The bird proved to belong to this species, and was evidently exhausted by fatigue and hunger (T. J., Bray's 'Tamar and Tavy,' vol. i. p. 353).

Mr. Plumtre Methuen informed Mr. Yarrell that he had obtained a specimen shot near Plymouth in February 1839 (Yarrell, B. Birds, 2nd ed. ii. p. 515).

The last, and best authenticated, occurrence is that recorded by Mr. Gatcombe, who purchased a specimen he saw hanging up in a poulterer's

shop in Stonehouse, which had been shot on the Tamar, Oct. 30th, 1851 (Zool. 1859, p. 6376).

The Rev. G. Tugwell mentions this species as a "rare visitor" to North Devon, but he gives no instances of its occurrence, and we have no knowledge of any specimen having been obtained in that part of the county.

In Cornwall four specimens of the Purple Heron have been secured, which were all seen in the flesh by Mr. E. H. Rodd. A very fine example in perfect summer plumage, which we saw in that gentleman's rich collection, was shot in a sedgey grove at Killiow House, near Truro; another fine adult in beautiful plumage was shot on April 8th, 1850, in the parish of St. Buryan, within five miles of the Land's End; another, a female specimen, was sent to Vingoe, the Penzance bird-stuffer, from the neighbourhood of the Lizard, on April 24th, 1867; and on Sept. 2nd, 1878, an immature bird was forwarded to Mr. Rodd from the Scilly Islands.

We know of no Somerset Purple Herons; but two have been obtained in Dorsetshire, one shot at Hyde, by Mr. Radclyffe, and another in 1848, from the neighbourhood of Dorchester, is in the collection of Mr. Henning (Mansel-Pleydell, 'Birds of Dorset,' p. 129).

[Great White Heron. *Ardea alba*, Linn.

An accidental visitor whose occurrence is doubtful, as no specimen has been obtained, and only one is supposed to have been seen, in this county.

A Heron, pure white all over, with jet-black legs, would easily be distinguished at a considerable distance; so that it is not likely that any examples of this rare straggler from the South of Europe can have visited this country and have escaped detection. Indeed, there are instances on record in which it has been seen and not obtained, for it possesses all the wariness of the Common Heron and is well able to take care of itself. It is about the same size as our well-known English species. In the Supplement to his 'Ornithological Dictionary' Col. Montagu announced its first recorded appearance in the West of England:—"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. Kerr Vaughan, rector of Aveton Gifford, 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 (cinerea)*; 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 his 'Cornish Fauna' Dr. Bullmore reports a Great White Heron having been seen at Penzance, on Feb. 4, 1866:—"A White Heron was observed in company with two of the common species under the cliffs at Penzance. It remained on the coast several days, but was so shy and wary that it never suffered its pursuers to approach within gunshot. One morning, however, just at daylight, a friend of mine risked a shot,

though at a long distance off; it was, unfortunately, unsuccessful, and the bird at once flew away, and has never since been heard of."

The South-American allied species, *Ardea egretta*, is an equally unapproachable bird. We possess the bill of one, as a trophy, which was shot by Mr. G. F. Mathew, R.N., after a long stalk, on a day when he also obtained a beautiful pair of the American Egret, *Ardea candidissima*, which we have in our collection.

Mr. E. H. Rodd, of Penzance, received information from his nephew that the coastguardsmen at Scilly had reported to him that a Great White Heron for some time during the autumn of 1870 frequented the Hedge Rock, a favourite resort of Common Herons; but the bird, being shot on December 26th, proved to be a Spoonbill (B. of Cornwall, pp. 292, 298.)

Little Egret. *Ardea garzetta*, Linn.

An accidental visitor of very rare occurrence.

This beautiful Egret, a native of the Southern and Eastern portions of the globe, has not been so fortunate as the preceding species, as it has been secured in the very few instances in which it has been observed in our West Country.

The Rev. Robert Holdsworth, of Brixham, informed Mr. Yarrell that in 1816 a bird was shot on Flatoars, a shoal in the river Dart, dry at low tide, which exactly corresponded with the description of the Egret in Montagu's 'Ornithological Dictionary' in its second year's plumage, being tinged with grey on the neck and breast. One in the collection of Mr. Newton, of Millaton Hall, Bridestow, is said by Dr. Moore to have been obtained near Crediton (Rowe's Peramb. Dartmoor, p. 234). Mr. J. Brooking Rowe speaks of "one or two on the Tamar" (Trans. Plym. Inst. 1862-63).

An adult shot below Topsham on the Exe, in May 1878, was deposited at our request in the A. M. M. by the owner, Mr. E. H. Harbottle, architect, and it has remained there ever since. We saw the bird in the hands of Mr. Atkins, a bird-stuffer in Exeter, to whom it had been sent for preservation, soon after it had been received by him (J. G., Zool. 1870, p. 2308; Harting's 'Handbook of B. Birds,' p. 148; H. Saunders, 'Yarrell's B. Birds,' 4th ed. iv. p. 185, and 'Manual of B. Birds,' p. 361). All of the published records say it was killed at Countess Weir, but we believe it was obtained about two miles further down the estuary below Topsham. Mr. Howard Saunders considers this specimen the *only* British-killed example "about which there can be no doubt."

Buff-backed Heron. *Ardea bubulcus*, Audouin.

[The Little White Heron of Montagu was this bird in immature plumage.]

An accidental visitor of extremely rare occurrence.

The Buff-backed Heron is a native of Southern Europe and of Africa,

which has twice been met with in South Devon, and these are still, we believe, the only instances of its occurrence in the British Isles. In his 'Ornithological Dictionary,' Col. Montagu writes:—"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, which was placed in our collection by a gentleman to whom we are obliged on many similar occasions, Mr. Nicholas Luscombe, of that place. . . . 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 Prawle." A great many years had to pass before the second British specimen was secured. In the 'Zoologist' for 1851 (p. 3116), Mr. Cleveland, of Tapeley Park, Bideford, states that he had received a very fine specimen of the Little White Heron (*Ardea russata*) which had been shot in the south of Devon in the April of that year. Mr. Yarrell was informed by the Rev. Robert Holdsworth that Col. Montagu's specimen was shot by Mr. W. F. Cornish, at South Allington, in the parish of Chivelstone. It is still preserved in the gallery of British Birds in the National Collection at South Kensington, but is now somewhat grimy from age. This species is very common in the South of Spain, where it finds its chief European stronghold. Mr. H. Saunders ('Yarrell's British Birds,' 4th ed. vol. iv. p. 189) states that thousands may be seen in the marshes of Andalucia amongst the cattle, often seated on their backs and picking off ticks, from this practice gaining from the natives a name which signifies "cattle-cleaners." A very closely allied species is common in India, nesting around the tanks, and we have its eggs in our collection. The adult male of the Buff-backed Heron is a very handsome bird, snowy white in plumage, with the exception of the crown of the head and the upper part of the neck in front, which are bright reddish buff. A beautiful plume of hair-like feathers of buffish red depends from the breast, and another plume of similar coloured hairy feathers springs from the lower part of the back and extends beyond the tail.

Squacco Heron. *Ardea ralloides*, Scop.

An accidental visitor of occasional occurrence.

The Squacco, slightly smaller than the preceding species of Heron, to which it has some superficial resemblances, is a much more frequent straggler to the South-west of England, having occurred five times in Devonshire, at least a dozen times in Cornwall, chiefly in the Land's End district, and four times in Dorsetshire. In the county of Somerset

* This species of Heron is very fond of attending upon cattle, as are other members of the Heron family, and has gained its specific name "*bubulcus*," the herdsman, from that habit.

Mr. Cecil Smith was informed of one, without any particulars, which was included in a list of rare birds furnished by Mr. Baker, of Bridgwater, to the 'Proceedings' of the Somersetshire Archaeological Society for 1850. He also learned from Mrs. Turle, the bird-stuffer of Taunton, that she had stuffed this bird, which had been sent to her from Bridgwater. The Squacco generally makes its appearance in this country in the months of April and May, and there are instances of its having been obtained in most of the summer months. In the month of May, 1849, "a flight" of this beautiful little Heron was recorded by Mr. E. H. Rodd as having appeared in the neighbourhood of Penzance, and three examples of it were brought to Mr. Vingoe, the bird-stuffer in that town. Writing to the 'Zoologist' on May 7th, 1867 (Zool. 1867, p. 830), Mr. Rodd says: "We generally get specimens of this elegant Heron *every spring* (the italics are our own) from the Land's End district, and I believe that every example that has come under my notice in the last thirty years has occurred at this season of the year only." It was the good fortune of Mr. Rodd to examine more British examples of the Squacco than any other English ornithologist, some eight or nine having passed through his hands; but none of them were in perfectly adult plumage, although one or two would have reached it had they been suffered to live a few weeks longer. When we reflect upon the sad slaughter of these beautiful birds we cannot help concluding that had they escaped they might possibly have nested in this country, as would also some of the numerous Night-Herons and Little Bitterns whose untimely deaths we have also to record.

One of the Devonshire specimens which is in extremely beautiful plumage is before us as we write. It was shot by a sailor at Braunton, in North Devon, on 10th June, 1878, and was brought to the Barnstaple bird-stuffer as "a Parrot, or something"! This example possesses a finely-developed occipital crest, and has the filamentous feathers springing from the lower part of the back; but the centre of the throat is buffish white, and the neck has longitudinal streaks on either side of reddish brown, while the plume from the breast is not yet indicated, showing that our bird has not fully attained the adult dress, in which state the Squacco has been very rarely met with in this kingdom. One shot on the Fleet Water, Wyke Regis, near Weymouth, on 1st July, 1867, and brought in wounded to that town, is stated to have been in full adult plumage. In the same year, on 15th May, another Dorsetshire example was recorded in the 'Field,' which was obtained at Fryers Mayne, near Dorchester.

In this little Heron "the feathers of the back are elongated; the webs disunited, each filament having the appearance of a single hair, from which circumstance the term 'comata,' hairy, has been applied to it" (H. Saunders, Yarrell's B. Birds, 4th ed. iv. p. 194). It seems to have occurred more often of late years, or else must previously have been overlooked, as we search for any record of it in vain in the earlier lists of the Devonshire avifauna. The Squacco is a common species in Southern Europe, South-western Asia, Egypt, and Nubia, and in North Africa generally. Like the preceding species it is fond of the society of cattle, and especially of herds of swine. One captured near Penzance had an entire shrew-mouse and the remains of

many beetles in its craw. It is said to be entirely a day feeder, hunting for frogs, worms, fish, shell-fish, &c.

A nearly adult specimen was killed by a gamekeeper of Sir Fred. Rogers by the side of a large pond close to the house at Blachford, near Ivybridge, the seat of Lord Blachford, in June or July 1840 (Yarrell's B. Birds, 1st ed. ii. p. 562, 2nd ed. ii. p. 531; R. A. J., 'Naturalist,' 1851, p. 59; J. G., Zool. 1873, p. 363); one or two have been obtained on the Tamar (J. B. R., Trans. Plym. Inst. 1862-3, p. 75). Mr. Marsh-Dunn had a specimen in his fine collection which he obtained from Bolitho of Plymouth, which was said to have been obtained at Kingsbridge. The adult male in our collection was killed on Braunton Marsh on 10th June, 1878 (M. A. M., Zool. 1878, p. 435).

Little Bittern. *Ardetta minuta* (Linn.).

A casual visitor, usually in spring and autumn.

Hardly a year passes without an example of this tiny Bittern, whose body, Col. Montagu remarked, is no larger than a Fieldfare's, being met with in some parts of the kingdom, and it has been very frequently observed in Devonshire, more especially in the southern division of the county. In the north of Devon, as is the rule with birds which are stragglers from the continent, it is not so often obtained. When the Little Bitterns first arrive in this country, and this is generally in the spring months, they often seem to be stupified by the labours of migration, as they are encountered in strange places for any Heron to be found in, and have frequently permitted themselves to be caught by the hand while standing in an attitude peculiar to the Bittern family, the neck resting far back upon the shoulders, with the head and beak pointed straight upwards, in which position they not a little resemble a piece of dry wood. There is little doubt that if they could escape molestation some of these small Bitterns visiting us in the spring would nest with us, and it is probable that some have actually done so, and that the young birds of the year, which are occasionally met with in the autumn, may not be migrants, but birds which have been reared in some secluded spots. The skulking habits of the Little Bittern, and the thick cover in marshy places in which it loves to hide, are all in favour of its avoiding detection. It is numerous in Holland, where it nests regularly, and is a summer visitor to that country, and also to most parts of Southern Europe, retiring to Africa for its winter-quarters.

Montagu records three specimens from the neighbourhood of Crediton in the summer of 1808, on the authority of Mr. Comyns. One of them shot in May was a female and contained forty eggs, some considerably enlarged, and as a male was afterwards shot, which had been previously observed near the same place, it is probable a brood would have been reared had the birds not been shot (Orn. Diet., Suppl.). Dr. E. Moore also mentions two examples from North Devon (Mag. Nat. Hist. 1837, p. 319; Rowe's Peramb. Dartmoor, p. 231).

A male and female occurred at Kingsbridge between 1840 and 1846 (H. N., Zool. 1847, p. 1695). Two specimens were killed at Flete near Ermington (C. J. C. Bulteel;

Zool. 1849, p. 2528). One at Budleigh Salterton in 1849 (R. C.). A fine male was captured when apparently asleep at Prawl, April 23rd, 1852 (C. P., Zool. 1852, p. 3474). A female, near the Start Lighthouse, in March 1864; two near Plymouth, May 7th, 1865, one, a male, being killed (J. B. R.). One at Witheridge Moor, North Devon, Sept. 1865, is now in the collection of the late Mr. Marsh-Dunn at Teignmouth. One, the beginning of May 1868, at Braumton, near Barnstaple, shot by Mr. Williams's keeper (M. A. M., Zool. 1863, p. 1295).

A female flew ashore and alighted on a small boat, where it was captured alive, at Seaton, May 20th, 1869 (J. G.). A female, near the Start Lighthouse, in May 1869. One was killed in the allotment-ground close to Axminster Railway-Station about 1872 (Pulman's 'Book of the Axe,' p. 25). One was killed near Erme Bridge, May 26th, 1873, having been observed for a fortnight previously (J. G., Zool. 1873, p. 3638). An adult was taken alive by hand near Plymouth, exhausted by starvation, April 1876 (M. A. M., Zool. 1876, p. 5046). A very handsome male bird was shot at South Milton, June 2nd, 1885, and is now in Mr. E. A. S. Elliot's collection. Another, a lovely male in full plumage, shot at Pamflete on his pond there by Mr. John Bulteel, May 14th, 1887, is now in the collection of Rev. G. C. Green, of Modbury (R. P. N.). Within a year or two a Little Bittern was blown ashore one stormy night at Teignmouth, and was captured alive, but soon died (W. R. H. J., *in litt.*).

The Little Bittern, according to Mr. Rodd, does not appear to be so often noticed in Cornwall as it is in Devonshire. We know of four or five Somerset examples, and seven or eight are mentioned by Mr. Mansel-Pleydell as having occurred in Dorsetshire.

The call-note of the Little Bittern, heard at night, resembles the short bark of a dog, and quite recently a gentleman writing to 'Land and Water' from Ireland, describing a live Little Bittern which he had in his possession, added that after he had become familiar with its cry he recognized it as one he had often heard of evenings in his neighbourhood. It is thus to be presumed that this bird may have successfully nested in that part of Ireland, as it is believed to have done occasionally in the county of Norfolk.

Night-Heron. *Nycticorax griseus* (Linn.).

A casual visitor in spring and autumn.

The record of the Night-Heron in Devonshire is, indeed, a sad one. This singular bird has made several efforts to obtain a home by the banks of our beautiful trout-streams, but has almost invariably fallen a victim to the gun. Had it been unmolested it would certainly have reared its young with us, and have returned again each spring to the same neighbourhood. The flourishing colony of Night-Herons in the Zoological Gardens in London is a sufficient witness to the suitability of our climate to this species. It is a shameful reflection upon our hospitality and common sense when we recount the list of harmless, beautiful, and interesting birds which are wantonly butchered and prevented from establishing themselves in our midst. Already we have mourned over the Golden Oriole, the Hoopoe, and Montagu's Harrier; and now we have to complain that, like those birds, the Night-Heron has been similarly disappointed in its attempt to domicile itself in this country. In the months of May and June, in the year 1849 (we grieve to recount the

story), no fewer than eight Night-Herons—four pairs of adults—were shot on the banks of the Erme, in South Devon, near a spot where sundry unfortunate Little Bitterns were also massacred. We are glad to set against this dark tale a somewhat better report from the north of the county. Mr. Edwards, who was then residing close to New Bridge, on the Taw, informed us that throughout the summer of 1869 he frequently saw several large grey birds, which looked like Gulls, flying over the river in the evening, and heard them uttering a hoarse cry. A fine adult male, probably a member of this very family, was shot on 14th May in that year, perched upon a tree overhanging the water, a little on the Barnstaple side of New Bridge. Many examples of the Night-Heron have been obtained in Cornwall; among them a very handsome adult male in the possession of Mr. Hill, of Helston, who kindly sent us a photograph of it, which has *ten* occipital plumes. In general the adults have only *three* snow-white plumes, but in very old birds the number is supposed to increase. Mr. Vingoe, at Penzance, had an adult Night-Heron sent to him which had *six* of these plumes. Another Cornish specimen, shot at Gunwalloe, had *eight*. It is curious, after this, to state the experience of Mr. J. H. Gurney, Jr., who examined a number of Night-Herons in Egypt, and arrived at the conclusion that the normal number of plumes is only *two*!

We can find mention of but one example of the Night-Heron in Somerset, a county which, from its extent of marshy peat-moors, might be expected to be often visited by this bird, and this was in the collection of Mr. Stradling, and was obtained near Bridgwater. Of all parts of England this most interesting county has suffered most from the absence of local naturalists, and very little is known about its ornithology. Mr. Cecil Smith had few correspondents, and his own experience was limited to but a small district around Taunton. In Dorsetshire Mr. Mansel-Pleydell considered the Night-Heron to be rather a rare bird, but knew of several instances. A Dorsetshire example may now be seen in the Literary Institution at Frome, having been procured by the late Prebendary Horner, of Mells Park, from the neighbourhood of Weymouth. On this gentleman's death his collection, which contained many rare birds, was presented to the town of Frome. Unfortunately no information can be obtained respecting the localities which provided this interesting collection. There are specimens of the Little Gull, Sabine's Gull, Dusky Shearwater, &c., which we have often examined, supposing that in all probability they might have come from the Devonshire coast.

The Night-Heron is strictly nocturnal, hiding in the daytime among the thick foliage of a tree or bush, perched often on some large bough close to the trunk. At dusk it rouses itself and comes forth to feed, flying with low and heavy beats, and uttering some harsh and disagreeable notes. The young birds are brown all over, with elongated yellowish-white spots. In this plumage Col. Montagu described it as a distinct species under the name of the *Gardenian Heron*. In their complete plumage the adult birds are very handsome; the top and back of the head are black; from the nape descend some long white plumes, which vary in number according to age; the back and scapulars are greenish black;

wings and wing-coverts ash-grey; and the whole of the underparts pure white.

It would seem that in certain years there is a small migration of Night-Herons to this country in search of a breeding-station.

Dr. E. Moore and Bellamy record several Night-Herons shot at Leigham, Aveton Gifford, and Ashburton.

An adult male was shot on the Avon near Hatch Bridge, in 1844, and is now in the collection of the late Mr. J. Ellior, of Kingsbridge (H. N., Zool. 1847, p. 1695, and E. A. S. E., MS. Notes). The Rev. Courtenay Bulteel states that he himself killed no less than seven, and Mr. R. A. Julian, Jnr., one, in May 1849, at Flete, near Holbeton and Erme Bridge, four of them being adult males and four adult females (Zool. 1849, p. 2528). These are now preserved in the collections of Lord Lilford, Mr. Andrews, of Modbury, and the late Mr. Marsh-Dunn, of Teignmouth. Mr. J. Gatcombe examined all these birds. A specimen in the plumage of the second year was shot by a son of Mr. Bulteel on the river Erme, near Ivybridge, on 2nd June, 1873 (Zool. 1873, p. 3631). An adult male was shot on the Taw, two miles above Barnstaple, in May 1869, by Lieut. W. C. Mathew (Zool. 1869, p. 1803). An immature spotted specimen was shot by Mr. George Balkwell on the river Avon January 7th, 1876 (H. N., Zool. 1876, p. 4843; and R. P. N., MS. Notes). Mr. H. Nicholls has another immature example, shot at Churchstow by Mr. Edmund Bray, and procured one almost in nesting-plumage from the same locality in October about 1864. A specimen was also shot by the Rev. W. Wills, of Axminster (Pulman's 'Book of the Axe').

Bittern. *Botaurus stellaris* (Linn.).

A winter visitor, usually of somewhat rare occurrence in the south of the county, but still regularly obtained in the north around Barnstaple. In some years many have been killed. Thus, in one severe winter Mr. Henry Nicholls, of Kingsbridge, had eleven specimens brought to him.

Some thirty years ago, before the present commodious market-house had been erected in Barnstaple, the farmers' wives were wont on the market-day to set their panniers on either side of the High Street. It used to be a matter of great interest to us, in those days, especially in the winter-time, after a severe frost, to walk the whole length of the street inspecting the various stalls for the sake of discovering if any rare birds had been brought in amongst the numerous Snipe, Woodcocks, Wild Ducks, Wood-Pigeons, &c., which would be exposed for sale. In hard weather we should be certain to meet with three or four Bitterns; we have known of a dozen brought into the town in a single week. We can remember hearing of three having been flushed together out of a small osier-bed adjoining the Taw, and two of them, which had been shot right and left, were long in our possession. Bitterns were almost equally numerous at the time we refer to in the neighbourhood of Weston-super-Mare, in Somerset, where we have examined a great many which were brought into the local bird-stuffer from the adjacent levels, and both at Barnstaple and at Weston-super-Mare the old price for a fine Bittern was half-a-crown. At the date to which our experience goes back a few Bitterns were met with every winter, being exceptionally numerous when the winters were severe, the birds frozen out from their usual haunts amongst the sedge

then seeking warm drains and orchard-hedges, where they were easily flushed and shot. One which fell to our gun when we were sniping in mild weather chanced to be only winged, and on our approach threw itself upon its back upon the ground and made a desperate defence, striking upwards with its claws and beak, so that it had to be warily handled. There is a considerable difference in size in specimens of the Common Bittern, the females being always smaller than the males, and sometimes, as we have ourselves detected in one or two instances, extra small examples are erroneously set down as American Bitterns; and there is a considerable degree of variety in the plumage, very light examples being occasionally met with, as well as very dark ones. Mr. H. Stevenson, in his admirable 'Birds of Norfolk,' calls attention to the beautiful purplish bloom on the feathers of the head and back of adult birds when freshly killed.

Bitterns are nocturnal birds, and are never seen on wing by day unless they are disturbed from their cover. They then rise with great reluctance, looking not unlike awkward Cochin-China fowls, and drop again immediately into the first shelter. They prefer to climb up the tall reeds rather than take flight, even when a dog is closely pressing them. When seated among the reeds a Bittern might easily escape detection, for, as Mr. Dresser well says, it looks "like an old stump or a bundle of dried flags."

In old days the Common Bittern, or Bittour, as it was also called, was a resident bird in this country, and its booming cry was heard at night from every marsh; it may still nest occasionally in a few places in some of the remaining fenlands in the East of England, but all our Devonshire Bitterns are winter migrants from the Continent. The strange nocturnal cry of the bird is emitted as it stands on the ground in its characteristic attitude, in which the head and the beak are directed vertically upwards. The Bittern is a solitary and unsociable bird, and it is rare to find more than one in the same spot of sedge, except at the nesting-time. The Barnstaple bird-stuffer assures us that, even at the present day, a winter never passes without two or three Bitterns being brought in. The severe winter of 1890-91 produced a great number, and we ourselves heard of seventeen having been shot at various places in Devon and Somerset alone. The Rev. G. C. Green, of Modbury, South Devon, has informed us that, when he was fishing on the Erme on 14th April, 1887, he "flushed, and had a splendid sight of, a grand Bittern, three times in one day." It was quite close each time, so that he might have counted every feather. He kept it quite secret for a long time, in hopes that the bird might have got, or might find, a mate, and might breed in the Orcherton marshes down below. But he never saw the bird again, or heard of its being seen, so that it must have left the neighbourhood.

Bitterns were particularly numerous in the winters of 1829, 1831-32, 1848-49, 1853-54, 1854-55, 1855-56, 1878-79, 1879-80, 1889-90, 1890-91. One or more also occurred in the years 1861, '64, '65, '66, '67, '72, '74, '75, '81, '83, '87.

Many were shot in January and February 1855, and January 1856 (Zool. 1856, p. 5064), and though we can find but one occurrence in Devon in November 1866,

a large flight visited Cornwall at that time. Several were shot near Plymouth in December 1878 and January 1879. In December 1879 one was killed in the parish of Modbury and four near Kingsbridge. In December 1889 three were killed in North Devon. In November and December 1890 and January 1891 at least a dozen were shot at Slapton Ley (W. Toll, *in litt.*), and in January 1891 several occurred at Totnes (R. P. N., *in litt.*). Dr. E. Moore mentions two specimens obtained on the Exe in May (Trans. Plym. Inst. 1880, p. 324); Mr. R. Cumming obtained one near Exeter in March 1849; one occurred near Cullompton early in March 1890; and one, recorded as a "Little Bittern," was shot near Monk Okehampton in June 1889 (Zool. 1890, pp. 105, 185). With the above exceptions the Bittern has been obtained only in the months of November, December, January, and February. The principal localities where it has occurred in Devon are the Tawton marshes above Barnstaple, Braunton Marsh, and the valley of the Taw; the marshes of the Culm, Exe, and Clyst; Torcross, Slapton, and other Leys near Kingsbridge; the neighbourhood of Plymouth and the valley of the Tamar.

The Bittern does not appear to have been any more plentiful in Polwhele's time in this county than it is at present.

American Bittern. *Botaurus lentiginosus* (Mont.).

[This was the Freckled Heron of Montagu.]

An accidental visitor of extremely rare occurrence.

As its name imports, this is a common species in North America, from which continent stragglers have occasionally found their way to this country. It is a matter of surprise that a bird which is not remarkable for any power of wing—indeed, the Bitterns are, for the most part, heavy and awkward fliers—should be able successfully to accomplish so great an aerial journey; and we can only suppose that the few that have reached England and the Continent must have, while on their way, alighted with outstretched wings upon the surface of the water to rest, as other birds of equally feeble flight have been detected in doing. But we believe that all stragglers to this country from America travel as far as possible by an overland route, reaching us across Northern Asia and Europe, so that the distances they would have to accomplish over water would not be excessive. It is impossible that any American Bitterns could cross the wide Atlantic unless they were passengers on the rigging of some ship. Not all the *soi-disant* American Bitterns reported as having been obtained in this country can be accepted as genuine, for some, upon examination by competent ornithologists, have resolved themselves into small examples of female Common Bitterns. But it may confidently be said that the resemblance between the two species is but slight. Not only is the American Bittern a smaller bird, but it wants the decided hood of the Common Bittern, and the adults possess patches of light-yellow feathers upon the cheeks behind the eyes, while a broad black line runs from the gape down either side of the neck; and an unmistakable distinction is provided by the primary feathers of the wings, which, in the American Bittern, are in all stages of plumage uniform brownish black, the same feathers in the Common Bittern being distinctly barred with rufous. We had the pleasure of examining in the flesh an undoubted Devonshire specimen of the American Bittern shortly after it had been shot on some moorland near Parracombe, on Lord Fortescue's estate. This was towards the end of October 1875.

The bird was shot by Mr. Rickards, and is, we believe, still in that gentleman's possession at his house near South Molton. The first example detected in this country was one shot in the autumn of 1804 by a Mr. Cunningham not far from the river Froome, in the parish of Piddletown, in Dorsetshire, which passed into the collection of Col. George, of Penrhyn, in Cornwall, at whose sale it was purchased by Col. Montagu bearing the label "*Ardea minuta*." This bird, which Col. Montagu at once detected to be a stranger, was described by him as the *Freckled Heron*, and is now in the National Collection at South Kensington, where we have noted it with a reverent interest. The only Cornish example of the American Bittern (which seems to have been unknown to Mr. Rodd) is one stated by Dr. Bullmore, in his 'Cornish Fauna,' to have been shot at Tresamble, Gwennap, Nov. 4, 1873, and to have been sent to a bird-stuffer in Falmouth, where the doctor, as he was kind enough to write to inform us, examined it in the flesh. No other example has occurred in Dorsetshire since Col. Montagu's type specimen, and we know of no instance of it in the county of Somerset.

One at Mothecombe, near Plymouth, December 22nd, 1829 (Dr. E. Moore as "Freckled Heron," *Trans. Plym. Inst.* 1830, p. 323; and *Mag. Nat. Hist.* 1837, p. 320). A young bird of the year was shot towards the end of October 1875 by Mr. Rickards, on some high grounds near Parracombe, North Devon (*J. G., Zool.* 1875, p. 4719; and *M. A. M., op. cit.* p. 4720).

The specimen said to have occurred at Chudleigh, and preserved in Mr. Bower Scott's collection, was a Common Bittern, as that gentleman himself informed us.

[**American Green Heron.** *Butorides virescens* (Linn.).

In the late autumn of 1889 we received information that Foot, the bird-stuffer in Bath, had a small species of Heron which was a stranger, and paying him a visit we saw the bird, but were unable to identify it. Being in London a week or two later we examined the skins of American Herons at the South Kensington Natural History Museum, and at once recognized the unknown bird as the American Green Heron, a species common throughout the United States. We subsequently received full particulars of its capture from its owner, Sir C. Graves Sawle, Bart., of Penrice, St. Austell, whose keeper, W. Abbott, had shot it in Hay Bottom, a swampy valley running inland from the sea, on 27th October, 1889. The bird was a fine specimen, in beautiful condition, and almost in perfect adult plumage. This is the first occurrence of this American Heron in Europe. Its arrival on the Cornish coast is, however, no more extraordinary than that of the preceding species, or of any of the numerous American birds which have been detected in the S.W. of England. (*Zool.* 1890, pp. 105, 181.)]

Family CICONIIDÆ.

THE STORKS.

The Storks are greatly superior to the Herons and

Bitterns in their powers of flight, and with their strong wings are able to undertake vast aerial journeys, so that the Common Stork may serve equally well with the Swallow as our type of a migratory bird. Every spring countless numbers of these great white birds pour northwards towards Palestine on the right, and Central and Westward Europe on the left, through the great funnel of the Nile Valley, and distribute themselves over an extensive area for their summer-quarters. The British Islands are too far to the west for their range, although they come very near to us in Holland, where, throughout the summer, they are most conspicuous objects in the landscape, as they may be seen standing on the roof of almost every house. The Black Stork is a species of Eastern Africa and Asia, which does not extend itself so far to the west as the Common Stork, and instances of its occurrence anywhere in England are, as might be expected, extremely rare. We have met with both species in British Kaffraria, where the White Stork is known as the "Great White Locust-bird," as flocks occasionally make their appearance on the frontier of the colony, following the flights of locusts in January. On account of their valuable services in destroying these destructive insects they are not molested, and were so tame that we once walked through a flock at rest, scattered about over the "veldt," looking like so many sheep, and taking just as little notice of us as those animals would in England, although we carried guns.

White Stork. *Ciconia alba*, Bechst.

A casual visitor of very rare occurrence.

From the abundance of this bird in Holland, where it arrives with great regularity about 18th March, leaving again for the far south towards the end of August, we might well expect it to visit us more frequently than it does. It is, however, a very rare straggler, except where it might be reasonably looked for, on our eastern coasts. In the county of Norfolk

one or two appear regularly every spring, and Mr. Stevenson considered it strange that they have never been known to breed there, no record existing of a nest, even in those remote times when every Stork that showed itself was not shot down, as is the fate of the bird at the present day. In Holland the pious villagers provide boxes for the birds, the nest of a Stork being considered to bring good luck; but with us, as Mr. Stevenson remarks, the only box offered to them is "the bird-stuffer's case, wherein the victim of misplaced confidence inevitably finds its last home."

In the West Country the visits of the Common Stork are only accidental and are extremely rare. Besides the five instances of its occurrence in South Devon mentioned below, we know of only one Cornish example, a fine adult, killed in May 1848 in the Land's End district; while the only instance of its having been obtained in Somerset is one concerning which Mr. Cecil Smith had no information, which is recorded in the list of rare birds from the neighbourhood of Bridgwater furnished by Mr. Baker to the 'Proceedings' of the County Archæological Society for 1850. Mr. Mansel-Pleydell ('Birds of Dorset,' p. 132) knew of two which appeared in Poole Harbour in 1884, which were subsequently shot at Christ Church. We have no knowledge of any specimen having been secured in North Devon.

Dr. E. Moore says, on the authority of Mr. T. E. Gosling, that "three of these birds have at different times within the last ten years [1820-1830] been obtained on Slapton Ley, near Kingsbridge" (Trans. Plym. Inst. 1830, p. 347; Mag. Nat. Hist. 1837, p. 321).

In Morris's 'British Birds,' vol. iv. p. 151, it is stated, on the authority of Mr. N. Roe, that one was shot at Topsham, on the estuary of the Exe, 28th July, 1852.

A specimen in the Albert Memorial Museum, Exeter, was shot at Clyst St. George, four miles from that city, in January 1856, as recorded on a label attached to the box-case in which it came with the rest of the collection of the late Mr. F. W. L. Ross, of Topsham.

Black Stork. *Ciconia nigra* (Linn.).

An accidental visitor of extremely rare occurrence.

The Black Stork is more of an Asiatic and African than a European species, and being only a summer migrant to the South of Europe, cannot be expected so far to the north as the British Isles, except as an accidental storm-driven wanderer. Col. Montagu received a young Black Stork alive from his friend Mr. Anstice, of Bridgwater, which had been wounded on West Sedgmoor on 14th May, 1814; this was the first reported instance of the occurrence of this species in the British Isles. The bird lived for nearly a year with the Colonel, who carefully described its moults, habits, &c., in some interesting letters to Mr. Anstice, which were subsequently contributed by Mr. W. Baker, of Bridgwater, to the 'Zoologist.' This specimen still exists in the collection of British birds at South Kensington, and is probably the same bird as that mentioned by Atkinson (Compend. Brit. Orn. 1834) as having been obtained in the parish of Stoke St. Gregory. A Black Stork was shot on the Tamar, in South Devon, on 5th November, 1831, which was seen by Dr. Moore while it was still warm. It passed into the collection of Mr. Drew, and from thence into the rich and beautiful

collection of Mr. E. H. Rodd, where we have seen it. There is no Cornish example; but two are recorded from Dorsetshire, both of them obtained near Poole, when the small estuary which goes by the name of Poole Harbour was, in old days, a celebrated gathering-place for rare Waders, Geese, and Wild Ducks of all kinds, as those who can recall the mighty doings of Colonel Hawker and his punt-gun will be aware. One of these, shot on November 22, 1839, passed into the collection of the late Earl of Malnesbury, at Heron Court; while the other, shot in Poole Harbour in the autumn of 1849, is in the collection of Mr. J. H. Gurney. Another, seen in 1857 at Lodmoor, near Weymouth, was not obtained (Mansel-Pleydell, 'Birds of Dorset,' p. 133).

In 'The Ibis' for 1861, p. 372, are some interesting particulars concerning the nesting of the Black Stork in Bulgaria.

One was shot on the Tamar (or the Lynher, a tributary of that river on the Cornish side), on November 5th, 1831, and is in the collection formed by the late Mr. E. H. Rodd, of Penzance (E. M., Mag. Nat. Hist. 1837, p. 321; and Rowe's 'Peramb. Dartmoor,' 1848, p. 231; Rodd, Zool. p. 2147, and 'Birds of Cornwall,' p. 126; Couch, 'Cornish Fauna').

On 12th February, 1855, when the cold was extremely severe, a large bird was seen on the Exe near Topsham, which, from the description given to us at the time by a man who got within twenty yards of it, and failed to shoot it, owing to his gun missing fire, could have been nothing else than a Black Stork. Curiously enough, about a week previously, what was supposed to be a gigantic Heron had been seen near the same spot.

Family PLATALEIDÆ.

Spoonbill. *Platalea leucorodia*, Linn.

A casual visitor, usually during the autumn and winter months. The specimens obtained are generally immature.

Very many years ago this strange-looking bird was a resident in this country. If we go as far back as the reign of Henry VIII., according to Mr. J. E. Harting ('Zoologist,' 1886, p. 81), the Shovelard, as it was then called, used to place its great nests in the elms in the Bishop of London's grounds at Fulham; that place, as we are told, meaning Fowl-home, and even taking its name from the birds! But it is now more than two hundred years since there was a Spoonbill's nest in England, and the bird is only an occasional visitor, chiefly in the winter, to the West Country, although there are some few instances in which it has been seen in the spring. As it is still common in Holland, our eastern coasts are more often visited by this bird, as is to be expected, and hardly a year passes without some being obtained in the Eastern Counties, and that at the season of the *spring* migrations. Sufficient numbers have been met with in Devonshire to remove it from the list of our rarer birds, and small flocks have even occurred in the far West. Thus, in the third week of October, in 1843, as many as nineteen Spoonbills were seen near Newquay, in Cornwall (Dr. Bullmore); and on the opposite coast of the Bristol Channel, in the winter of 1854, eleven were shot on the shores of Milford

Haven, and seven more in the winter of 1855. Two or three are said to be seen about Pembroke every year. But, on either side of England, adults in their full plumage are extremely rare, the larger proportion of those obtained being in immature plumage, without the yellowish-white occipital plumes. The Spoonbill occurs very seldom in North Devon, two immature examples, which were obtained on the Northam Burrows, being the only ones of which we have knowledge.

The food of the Spoonbill consists of small fish, frogs, &c., and in search of these it works its curious bill from side to side in a scooping fashion. It rarely strays far inland, feeding for the most part upon the shore or on the edges of large lagoons in marshes.

Montagu mentions two specimens which were shot near Kingsbridge, one immature in Nov. 1804, and an old female 16th March 1807 (Orn. Dict., Suppl.). One on the Tamar, another on the Exe; and one killed on Millbrook Lake (E. M., Trans. Plym. Inst. 1830; Rowe's Peramb. Dartmoor, 1848, Appendix, p. 234). One shot in 1835 on the Tamar, and one in 1838, both in the month of December (J. C. B., Nat. Hist. S. Devon, p. 210). One on the Warren Sands at Exmouth, Dec. 1847 (W. R. S., Zool. 1849, p. 2385). Two between 1840 and 1847 at Kingsbridge (H. N., Zool. 1847, p. 1694). One at Bridford, whilst feeding with a flock of Geese in Dec. 1849 (R. C., and 'Exeter Gazette'). Two immature birds at Exmouth, at end of Dec. 1853; one of these is in the A. M. M. One at Slapton Ley, Nov. 12th, 1858 (H. N., MS. Note-), and one in Dec. 1858, at Plymouth (Zool. 1859, p. 6377). Three immature birds at the latter locality, Nov. 3rd, 1862 (J. G., Zool. 1863, p. 8330). Bolitho had one from the St. Germans River in Cornwall, not far from the border of Devon, April 6th, 1867. One immature specimen occurred at Northam Burrows, North Devon, Oct. 26th, 1867 (Zool. 1867, p. 1017). An immature bird was killed on the banks of the St. Germans River, Oct. 14th, 1876, and another in Sept. 1878, on the Tavy (J. G., Zool. 1877, p. 44; 1878, p. 43). One at Northam Burrows at the end of Nov. 1879 (Zool. 1880, p. 70). One on St. Germans River, near Plymouth, Nov. 1883 (Thos. Cornish, Zool. 1883, p. 495). A young female on the Avon, between the weir and Aveton Gifford Bridge, Nov. 4th, 1884 (E. A. S. E., Zool. 1885, p. 29). A fine adult specimen in the collection of the late Mr. Byne, afterwards the property of the late Mr. Marsh-Dunn at Teignmouth, is said to have been obtained on the estuary of the Exe.

The Spoonbill has frequently visited Cornwall; in Somerset only two instances are recorded; in Dorsetshire several have been obtained in various years in Poole Harbour.

In 'The Ibis' for 1887, p. 412, there is an interesting account of a visit paid by Messrs. Selater and Forbes to a great breeding-place of the Spoonbill at the Horster Meer, between Amsterdam and Utrecht, where there were several thousand nests placed upon the swampy ground.

Glossy Ibis. *Plegadis falcinellus* (Linn.).

An accidental visitor, of rare occurrence, in the autumn.
From the old lines quoted by Mr. Stevenson—

"The Curlew, be she white or black,
Carries twelvence on her back,"—

we may infer that the Glossy Ibis, which also went by the name of the Black Curlew, was more commonly met with formerly, and was better known to the race of shore-shooters, than it is at the present time. It is a curious, almost a grotesque-looking bird, and is to-day only an accidental

visitor to the West of England, where it was never seen so often as it used to be on the shores of the Eastern Counties. Two Devonshire specimens, which belonged to Col. Montagu, are still to be seen in the National Collection of British Birds at South Kensington, looking as fresh as if they had been shot only yesterday, there being something in the metallic-coloured plumage of this bird which seems to resist the fading properties of light. We have never had the fortune to come across a Glossy Ibis ourselves, but we handled one which was still warm at Budleigh Salterton, in South Devon, in Sept. 1866. We met a sailor carrying the bird in one hand and a gun in the other, who told us that he had seen it that morning on a strip of sand at the mouth of the Otter. After his dinner he had taken a gun and had found the bird at the same place. It was very tame, allowing him to walk up to it and shoot it, and he had a few moments before we came up sold it to somebody for a shilling! We know of only one example of the Glossy Ibis from North Devon, but several have occurred in the south of the county, of which we give particulars below. Some half-dozen specimens have been obtained in Cornwall. We saw two, almost in perfect adult plumage, in the Museum at Truro; one bore no record of capture, but the other was labelled as having been shot at Hayle. Several have occurred in Dorsetshire. The Somerset Peat Moors have produced a couple of examples; one of them, shot at Shapwick in 1859, is now in the collection of Sir H. Harpur Crewe, Bart., at Calke Abbey, Derbyshire.

Of the Devonshire examples two were obtained inland at a considerable distance from the coast. One shot at Holsworthy, Sept. 7th, 1851, was recorded in the 'Western Times' for Oct. 11th, 1851. Another was shot at Brideslow, on the N.W. borders of Dartmoor, in October 1835.

The Glossy Ibis used to go by various names, all of them descriptive of stages in its plumage: the Glossy Ibis is the immature bird; the Green Ibis is the bird advancing towards maturity; while the Bay Ibis, with the head and neck of a bright bay colour, is the adult. In their full plumage these birds are a deep maroon-red, with brilliant green and purple reflections on the wing-coverts and tertials. Specimens obtained in this country mostly belong to the Glossy Ibis, or immature stage. The home of this bird, in the summer, is the South of Europe, the marshes of the Danube, &c.

Montagu mentions three immature specimens shot in Devonshire: one in Mr. Comyns's collection [shot on the Exe, 1805]; another near Ivybridge, in middle of Sept. 1805; and the third near Plymouth, about 12th Oct. 1809 (Trans. Linn. Soc. ix. p. 198, and Orn. Diet.). One shot near Warleigh on the Tamar, and a pair killed at Slapton Ley, near Dartmouth (E. M., Trans. Plym. Inst. 1830, p. 325; Mag. Nat. Hist. 1837, p. 319). One at Brideslow, Oct. 1835 (J. C. B., Nat. Hist. S. Devon, p. 211). An immature bird captured at Blatchboro, near Holsworthy, Sept. 7th, 1851 (W. T., 'Naturalist,' 1852, p. 19; J. B. R., Trans. Plym. Inst. 1862-63, p. 76; Morris, B. Birds, iv. p. 172). This specimen is now in the A. M. M., where there is also one *said* to have occurred near South Molton in Oct. 1851. An immature bird was obtained at the mouth of the River Otter, Oct. 11th, 1866 (Zool. 1866, p. 524). One shot on the Dart not far from Totnes, Sept. 20th, 1839 (Von H., Zool. 1869, p. 1917), is in the collection of Mr. J. H. Gurney. A Glossy Ibis in the collection of the late Mr. J. Elliot, of Kingsbridge, was shot on the estuary there, but the date was not recorded. About 1870 one was seen in the autumn at Thurlstone Ley by a hunting party. A gun was borrowed, but proved so rusty that it refused to go off (E. A. S. E.).

Order ANSERES.

Family ANATIDÆ.

THE GEESE.

The great skeins, or "gaggles," of Wild Geese, on leaving their breeding-haunts on the tundras of Northern Europe, seek their winter-quarters in the south by the routes of the Baltic and the German Ocean, and are, in consequence, chiefly to be found as winter visitors to our Eastern Counties, those which reach the shores of Devonshire being very few in number in comparison. The Pink-footed Goose, which in the winter has been seen in flocks of six or seven hundred in Norfolk, and makes its appearance in that county with great regularity, so rarely extends its flight to the West that we have never heard of a single well-authenticated instance of it in Devonshire, Cornwall, or Somerset, and Mr. Mansel-Pleydell was only able to record two Dorsetshire examples. It is very doubtful if this Goose has ever occurred in Ireland, so that it affords a very good example of the preference given by the Wild Geese to our Eastern coasts. At the time to which our own experience reaches back the White-fronted or Laughing Goose and the Brent Goose were winter visitors regularly seen in both North and South Devon, and in severe weather were occasionally observed in considerable numbers. A few examples of the fine Grey Lag Goose and of the Barnacle Goose used also to be obtained, while the Bean-Goose was a pretty regular winter visitor in small flocks. At the present day the visits of Wild Geese to any part of our Devonshire coast are rare events. Their old haunts are much more disturbed; there are now twenty gunners on the look out for them where there

used to be one ; so that it is only natural these sagacious and wary birds should avoid places now become so dangerous to them, and our county ornithologists can only lament the absence of these once regular visitors from the North. In very severe winters, like that of 1890-91, a few are still driven by stress of weather to our estuaries and marshes, and one hears of Brent Geese, Laughing and Bean Geese being shot and brought to the local bird-stuffers, or being seen hanging up in game-dealers' shops ; but the old times, when Wild Geese were commonly seen flying overhead in <-shaped flocks in the autumn and winter months, have now passed away for ever. This is one of the inevitable changes which modern days have witnessed in our county ornithology, to be added to others of a similar character and to be equally deplored. With the exception of the Pink-footed Goose and the American Snow Goose, which last has occurred a few times in Ireland and the North of England, all the British species of Wild Geese can be included in our County List. Even the rare Red-breasted Goose has occurred twice in Devonshire.

* **Egyptian Goose.** *Chenalopex aegyptiacus* (Linn.).

Introduced. A large number of these handsome birds were formerly kept on a pond, or lake, at Bicton, near East Budleigh, the seat of Lady Rolle, and we have frequently seen parties of twenty or more flying down to the mouth of the Otter to feed, on autumn evenings, when they were extremely wary and very noisy, and had all the actions of genuine wild birds. These Geese sometimes roamed about the county, especially in severe winters, when the ponds were frozen over, and after very heavy rains ; as many as forty were seen in a flock near Exeter, on February 12th, 1869, when one was killed by a man who flung a pitchfork at them. Probably most, if not all, of the specimens which have been shot at large in Devonshire and the neighbouring counties were only wandering " Pond Ornaments " from Bicton, or from a piece of water near Crediton, where some Egyptian Geese were also formerly kept (G. F. M., ' Naturalist,' 1866, p. 360). The time of the year when some of these were obtained would entirely preclude the possibility of their having been migrants from Africa. Though most often obtained in mid-winter, they have been met

with in spring and summer as well. As they have been almost totally destroyed at Bicton, where once they were so numerous, it is probable that there will not be so many occurrences in future in the south of the county as formerly.

In 1868 Mr. James Barnes, the head gardener at Bicton, published in the 'Exeter Gazette' a very graphic account of the habits of the Egyptian Goose as observed by him there, and it is so interesting that we think it worthy of being reprinted *in extenso*, and accordingly subjoin it, feeling sure our readers will appreciate the quaintness of the style:—

“This is no doubt one of the most savage and pugnacious water-fowls we have here, and there are many of them. They fly about in large flocks to and fro, from lake to sea. These are their favourite feeding-grounds, though they range much for the sake of change, and have a rare taste for the best and freshest piece of watered meadow, or any other warm spots, where fresh and nice green-growing grass is to be found throughout the winter months. They are not silent at all, but go about prating and making a harsh gurgling noise as they fly, which may be heard a long distance off. Here they pair in the month of November, and at that season many fights take place, and there is an immense deal of chattering and noise as they fly from tree to tree. The highest and largest limbs of the great spreading oaks in the park are their favourite places of resort, and here they spend much of their time prating and fighting, till they knock each other off. Then they take a little rest, and away to the water to fight it out. Here again they go at it in earnest, and batter each other with all their might, with wings spread and beaks open, and their heads looking twice their natural size. Very often one takes the advantage, as quickly as lightning, of thrusting its beak through the other's open mouth, grinding its tongue and the lower half of its beak with impetuous strength and savagery. Presently the weakest one becomes exhausted, and the other, taking instant advantage of this, is on its back, to keep it under water, pecking and hammering away at its head the moment it ventures above water, and as soon as possible gets tight hold of the head, and holds it under water for so long at times, that one would never expect to see it above again alive. But I saw what I considered a greater act of cruelty the other day in passing through the park. Many pairs were prating away on the outspreading limbs of an immense oak. A pair fell to fighting, and down they came close to me on the grass. How they did batter each other with the elbow, or spur, of their wings! Then they made a change in the fighting by hammering each other's heads. They were soon open-mouthed, with their tongues loose, as it were, in the centre of their beaks. One took instant advantage, seized the other's tongue full grip, and tugged and twisted it in a manner horrible to behold. This act of cruelty I determined to put a stop to, and instantly parted them. But the peace was soon broken again; they flew to the lake, and there they went at it as vigorously as ever. There, of course, I left them to finish their battle in their usual way.

“The Egyptian Goose, notwithstanding its pugnacious propensities, is

always interesting, and at times a very peaceful bird. When once paired they are exceedingly true and attentive to each other. But no intrusion is allowed from their neighbours; in fact, each pair is jealous of every other pair, and village gossip is unknown amongst them. If any meddling is attempted, there is a desperate fight. I have seen a dozen or fifteen couples standing on the limbs of one great spreading oak, cavilling and chattering with all their might. They bring out very early broods. I have often seen the young abroad early in January, and throughout January and February there are always some broods hatched. Few, however, of these early broods are raised to maturity, the reason of which I will presently inform you. While incubation is going on by the Goose a wonderfully strict guard is kept by the Gander. He, at a distance, closely watches night and day. If an enemy, or even a neighbour, thoughtlessly attempts a near approach to the locality, no time is lost in giving battle. When the Goose requires to leave her nest to feed, notice is given by an inward, quiet kind of cackling, or chattering, and the Gander goes to relieve guard. On the islands here boxes and hutches, with plenty of hay, straw, and dry leaves, are provided for the water-fowl to choose their nesting-materials from, and, if they desire, places in which to make their nests. The Egyptian Goose, like the Wild Duck with us, does not always nest in these provided places, or on the ground, or under a thick bush, or other nice sheltered or well-protected spots. Oh, no! Here they often nest on the top of ivied walls, or on the forks of very large trees, where four great limbs diverge more particularly, or those which are clothed with ivy. In such places they make a nest and hatch. Yes, and thence convey their young down to the nearest water in perfect safety. One pair of Egyptians nested for many years in succession on the fork of a large tree in the American garden here, about fifty feet from the ground, and always conveyed their brood of eight or ten down to the water hard by with complete safety. Their broods here generally average in number, when first brought out, from seven to ten. I have occasionally seen thirteen, and even fourteen, Goslings in a brood. They are exceedingly hardy, notwithstanding which the early broods get very much reduced in numbers; indeed, very often the whole brood is lost. This, however, does not result so much from the inclemency of the weather, as you may at first imagine. Oh dear no! and thereby hangs a tale. The shrewdness, pugnacity, pluck, and natural craftiness of the Egyptian Goose are not sufficient to ensure its safety. There is another quiet, sly, and much smaller bird, an unmistakable match for Goosey, especially at the time when peace reigns, and Goose and Gander are alike absorbed in attending, with the utmost kindness, on their young. This other bird is a downright trickster, and a most comical devil too, wicked and funny at once. Oh, such sly, crafty tricks have I seen when close to them, and as it were in the very midst of the performance. I will relate a few real facts. This bird is no other than the Carrion-Crow. Amongst a number of dainties, this fellow is partial to young Ducks and Goslings, and the early broods get sadly diminished, and often altogether carried off by him. I have seen them perform their thievish tricks in

various ways. The young Ducks they have but little trouble with. When they come on land from an aquatic excursion, pretty much fatigued, the Crows pounce on them from some tree, where they have been waiting patiently for some time watching for a chance. Some time ago, one morning, I noticed a brood of ten pretty little Egyptian Goslings on the water. The next morning, on again passing the spot, there were but nine. The old birds were quite proud, and very attentive, and strictly guarding their family. But I could tell by their harsh cackle that an enemy was near at hand. On looking about I spied a pair of sleek shiny-looking Crows, quietly perched on some large limbs of spreading trees that extended nearly to the water's edge on the south side, where the old Geese intended to land their family. The Crows knew well enough where they would land, and, no doubt, made a shrewd guess about the time they would do so. Now, the Geese knew well enough the Crows were there waiting for them, as evinced by their cackle, and manœuvring, and strict attention. They did not intend their enemy should deprive them of any more of their brood. This was a deep laid plan indeed. Just as the old Goose came ashore, down came one of the Crows, hopping and jumping just ahead of her. The Goose bolted after the Crow, the Goslings running and squealing in single file after her, the Gander keeping guard behind. At this moment down pounces the other Crow, and knocked down one of the foremost Goslings, turning the poor thing over. The old Gander, however, was too quick. Before the Crow could get off his booty, he was up full mouthed, and then what a row and cackling all at once! The old Goose ran back, got her brood together, and gathered them over, close to the butt of a large tree, the Gander keeping strict guard. The pair of Crows kept hopping, and jumping, and running about and around, at a respectful distance, till they found the game was up. At the same time a brood of seven landed on the other side of the lake, and were quickly observed by the Crows. One of the Crows flew straight across, and caught up a Gosling in an instant, and made off with it before the parents could either shield their brood, or give battle. A terrible outcry and cackling were all that could be done to warn their neighbours that an enemy was at hand. I have seen many and various fights and plunderings such as these, and believe the Carrion-Crow to be a match for any bird in craftiness."

Mr. Comyns had an Egyptian Goose in his collection which was killed on the Warren [at the mouth of the Exe probably, and not near Sidmouth as stated] (E. M., Trans. Plym. Inst. 1830, p. 343). In 1839, Mr. F. W. L. Ross records (MS. Journal, ii. p. 17) that one was seen on the Exe some years previously, and he himself had seen three on the river near the sea, which were very wild, but that he killed two of them. One shot on the coast was bought in Exeter Market by Dr. Scott in January 1849 (Zool. 1849, p. 2385). Specimens occurred on the Exe in 1850, February 1855, and at other dates, the last in May 1891. One was preserved in the Sands Hotel, Slapton Ley, which had been shot there. We saw this bird in a cage at the hotel in January 1856. A fine male was killed there January 12th, 1885 (R. P. N., Zool. 1885, p. 68). Some were obtained on the Laira, apparently wild, in 1860 (J. B. R., Trans. Plym. Inst. 1862-3, p. 77) and in 1871 (B., MS. Notes).

This Goose has also been shot on several occasions on the Taw. One out of a flock in May 1865 (G. F. M., 'Naturalist,' 1866, p. 360); one April 1867 (Zool. 1867,

p. 831); two on December 28th, 1885, and one on January 2nd, 1886. These last three birds were seen coming from a north-west direction, and going south or south-east. They were at a great height, but suddenly came down rapidly to the river, not a quarter of a mile above Barnstaple. Several occurred in January 1891. (J. G. H., Zool. 1886, p. 76; 1891, p. 68.)

We handled two in the flesh which were shot on the Tone, a mile or two below Taunton, in July; one we skinned and mounted and have now in our collection was shot on the Taw near Barnstaple at the end of April; and we know of several others having been obtained in North Devon; there is one in the museum of the College at Westward Ho! which was shot near New Bridge, on the Taw, in the winter-time. Several have been obtained at different times at Weston-super-Mare; Mr. Rodd mentions examples having been shot in the winter-time in Cornwall; and Mr. Mansel-Pleydell knew of several which had been obtained in Dorsetshire during the winter months.

The home of this Goose is to be found, as its name implies, in the Nile valley and in tropical Africa. There are no authentic instances of its having occurred, even as a straggler, in any of the countries of Southern Europe, and Mr. Dresser does not include it in his beautiful work on the 'Birds of Europe.'

Grey Lag Goose. *Anser cinereus*, Meyer.

A casual visitor, of very rare occurrence.

This fine Goose, the progenitor of our ordinary farmyard Geese, is the only species of Wild Goose nesting at the present day anywhere in the British Islands, a few pairs still breeding annually by some of the lochs in Sutherlandshire. There was a time when it nested commonly in the fens of the Eastern Counties, and it is said to have taken its name from this circumstance, it being the only Goose out of all the various species seen in the winter-time which "lagged," or stayed behind, to breed, and did not join the flocks of other Geese going northwards for their summer haunts. However, at the present day, we learn from Mr. Stevenson's valuable book, that the Grey Lag Goose is almost as rare in Norfolk as it is in the West Country, where it is one of the most seldom seen of our British Geese; and we are aware of very few instances of its occurrence. One which we had in our collection was shot many years ago near Barnstaple: we ourselves once came across an example of this Goose when Snipe-shooting; we had just emptied both barrels at a Jack-Snipe, when out of some rushes right at our feet sprang a magnificent Grey Lag Goose, and we could only look at it! This was on a salt marsh, long since enclosed and drained, bordering on the Taw.

Several were brought to Plymouth Market in January 1829 and January 1830, as recorded by Dr. Edward Moore, who says it was sometimes seen on Dartmoor with other wild-fowl. Mr. Newton had a specimen (Trans. Plin. Inst. 1830, and Rowe's Peramb. Dartmoor, 1848). Bolitho notes a Grey Lag Goose which was brought to him by Mr. Gatecombe, January 18th, 1858, having been bought in Plymouth Market (MS. Notes). Mr. Gatecombe also records having obtained a female in the market at Devonport on 25th November, 1858, which was killed on the River Tamar (Zool. 1859, p. 6376). This specimen is now in the A. M. M. Mr. S. Square shot one at Thurlestone, after it had been observed for several days feeding on the Ley there, in company with four tame Geese, September 26th, 1886 (E. A. S. E.).

Mr. Cecil Smith knew of no instances of the occurrence of the Grey

Lag Goose in Somerset, nor have we been able to add it to the Somerset list of birds; in Cornwall Mr. Rodd was able to record but three which came to his knowledge, and one of these was obtained on the Scilly Islands; in Dorsetshire it is equally rare, only one or two examples being known to Mr. Mansel-Pleydell, who quotes Mr. J. E. Harting's remark as to the Grey Lag Goose being an inland bird, and not a frequenter of, or to be expected on, the coast.

Bean-Goose. *Anser segetum* (Gm.).

A casual winter visitor.

This Goose is the commonest of the British Wild Geese, but is one of those to which we have already referred as being more numerous on the Eastern coasts of the kingdom than it is on the West, where it is only occasionally seen. It is, however, far more often met with than the preceding species, and has occurred several times to ourselves. In the hard winter of 1860 a small flock of Bean-Geese appeared on Lundy Island, where they fed always far out in the middle of one of the stubble-fields, and although we once or twice watched for them, they never came near enough to afford a shot. In severe winters we have known them to appear on the Braunton Marsh, where examples have been obtained.

Montagu mentions two Devonshire specimens (Orn. Dict.). Many were obtained at Plymouth in January 1830 (E. M., Trans. Plym. Inst. 1830; Mag. Nat. Hist. 1837, p. 360). Some were seen in Plymouth Market in February 1855 by Mr. Gatcombe; some there December 22nd, 1874; one in December 1879; and a few in January 1881 (Zool. 1875, p. 4371; 1880, p. 48; 1881, p. 196). Three were shot by Mr. Walter Toll, of Street, on the upper waters of Slapton Ley, on 7th February, 1888. One is in Mr. Toll's collection, and was seen by us at his house, September 2nd, 1890, and one is in the collection of the late Mr. W. Bastard. The third was cooked and eaten (R. P. N., MS. Notes). An adult male was shot by Mr. E. A. S. Elliot, December 29th, 1890, on Kingsbridge estuary, and another was seen in company with it.

In Somerset Bean-Geese occasionally occur on the turf moors. Mr. Cecil Smith saw two at a poulterer's shop in Taunton, in December 1865, which had just come in, with a number of other wild-fowl, from the fenshooters. We have ourselves seen Bean-Geese near Weston-super-Mare, and during the severe frost and snow of January 1891 a flock of seven flew low over our garden at Buckland Dinham, in East Somerset. These birds continued about the neighbourhood for a fortnight, but none of them were shot. In Cornwall Mr. Rodd considered the Bean-Goose the commonest of the Wild Geese visiting the county, and states that in hard winters considerable flocks are seen. Mr. Mansel-Pleydell calls the Bean-Goose far from common in Dorsetshire; five were shot in Poole Harbour in November 1876.

The Bean-Goose goes very far north, beyond the Arctic Circle, for its breeding-quarters.

This Goose takes its name from the black nail on the tip of the upper mandible, which is of the shape of a bean; or, perhaps, from its making its appearance at the time of the sowing of winter beans.

[**Pink-footed Goose.** *Anser brachyrhynchus*, Baillon.

This species is of doubtful occurrence in Devonshire. Mr. Henry Nicholls says he saw three or four examples hanging up in a poulterer's shop in Kingsbridge many winters ago. They were shot on the estuary there (E. A. S. E., MS. Notes). A specimen mentioned by Bolitho, of Plymouth, in his MS. Notes, as having been received by him on 15th November, 1860, was supposed by Mr. Gatecombe to have been sent from Cambridge by Mr. R. A. Julian. The Pink-footed Goose in Mr. J. Brooking-Rowe's collection was obtained in Leadenhall Market.]

White-fronted Goose. *Anser albifrons* (Scop.).

[Laughing Goose: *North Devon.*]

A winter visitor, generally in severe weather, when it has sometimes been rather plentiful, both inland and on the estuaries.

The White-fronted or Laughing Goose used to be a regular winter visitor to North Devon, where it was more often seen than obtained, these wary birds being always on the watch, moving in the daytime from one ground to another, and passing overhead in "gaggles" of twenty to thirty in number, flying in V formation, with the point of the V forwards, and uttering their singular "laughing" cackle. Many a time have they thus passed over us in old days when we have been Sniping in Braunton Marsh and Braunton Burrows. It is only in very severe weather that it is possible to get a shot at them. Several were killed near the Taw, and brought to the Barnstaple bird-stuffer, during the very hard winter of 1890-91; and others have been obtained at various dates in by-gone years. We have also seen White-fronted Geese at Weston-super-Mare, and have noted some very fine examples hanging up in the gamedealer's shop which had been shot on the level near that town. One winter we several times saw a small flock flying low over the houses, and one day this flock passed close over our head while we were walking on the esplanade. There had been a long-continued black frost binding the ground with its iron bands, and these poor Geese were, doubtless, half-starved.

Great numbers were shot near Plymouth in January 1830 (E. M., Trans. Plym. Inst. 1830, p. 342). Some were obtained at Plymouth in 1855 (J. G.) and 1861 (E., MS. Notes); one was killed on the down near Calstock, October 20th, 1877; some were brought into Plymouth Market, October 1880; and a young one was seen there December 7th, 1882 (J. G., Zool. 1878, p. 29; 1881, p. 51; 1883, p. 166).

At Kingsbridge Mr. E. A. S. Elliot shot one out of a flock close to the estuary at Gerston, December 24th, 1878. A flock of twenty-five visited the district about Christmas 1890. They roosted sometimes in a farmyard at Rickham, and sometimes on Charleston Marsh; and some were shot (E. A. S. E.).

A flock of ten was seen on the Exe, January 22nd, 1841 (F. W. L. R., MS. Journal, iii. p. 40). Several occurred on that river at the end of 1846 (W. R. S., Zool. p. 2384). There were many on the Exe estuary in 1850, and we saw many again in January and

February 1855, obtaining a fine male on 31st January. Some occurred in November 1888, and one was shot there in January 1891.

Four were shot out of a flock on Braunton Marsh early in October 1877 (M. A. M., Zool. 1877, p. 498). This Goose visits Lundy Island in winter (Trans. Devon. Assoc. viii. p. 308).

According to Mr. Rodd the White-fronted Goose is not rare in hard winters in Cornwall, flocks having been noted feeding in turnip-fields in the Land's End district. In Dorsetshire it is rare, and Mr. Mansel-Pleydell states that, like all other Wild Geese, it becomes more scarce every year.

This Goose has a great range between its summer-quarters, which are in the extreme North of Europe, and its winter-haunts in N. Africa, India, and China. It is said by Capt. Shelley to be the commonest of all the Wild Geese in Egypt during the winter months. In Lapland a smaller species of White-fronted Goose occurs (*A. erythropus*, Linn.), and Mr. Cordeaux once saw one hanging in a stall in Grimsby Market.

In January 1888 Mr. Cecil Smith received the head, wings, feet, and legs of a Wild Goose which had been shot at West Buckland, near Wellington, in Somerset, close to the Devonshire border, which, from their small size, he supposed to have belonged to a Lesser White-fronted Goose. These fragments of the bird were exhibited by Mr. Crisp at a meeting of the Linnean Society in the month of April that year, and were considered to indicate an immature *Anser albifrons* (Zool. 1888, pp. 195, 228).

Brent Goose. *Bernicla brenta* (Pallas).

A winter visitor, occurring in flocks of considerable size in our bays, and in the estuaries of our larger rivers, especially in severe seasons. These flocks sometimes appear as early as September and October, and remain until April and even May.

The Brent Goose is a smaller species than any we have hitherto described, and is by far the most common of all the Wild Geese in our West Country, and also the tamest. As we write its name we seem once more to hear the crunch, crunch, of our boat as we are slowly beating against wind and tide towards a flock of these little black Geese on the mudbanks on the Barnstaple river, where it was numerous enough in the old days before the railways ran on either side, when the salt-marshes were still undrained and unenclosed, and when shore-shooters were few. We have shot Brent Geese at Instow as early as the middle of September and as late as the end of April. In old days a successful stalk of a flock used to result in six or eight being bagged to a single shot, but such chances are not to be had at the present day. Sometimes out of those obtained we would find one which was fairly palatable when cooked, but, in general, the flavour of the flesh was strong and fishy. The last shot we had at Brent Geese was in November 1874; when, sailing back to Instow from a day's Sniping on the Braunton Burrows, we espied two sitting upon the water, which were tame enough to permit us to come

within fifty yards before they rose, when we dropped them to a successful right and left. We have frequently seen small flocks numbering eight or ten of these Geese as high up the Bristol Channel as Weston-super-Mare, where we have known of many having been shot in various years.

In February 1855 a flock of about one hundred and twenty frequented the mudbanks on the Exe estuary below Topsham for ten days, and we frequently saw them. They often flew about over the town of Topsham when disturbed, and several were shot from the streets. Large flocks also visited the Exe in November 1871, in January 1880, January and December 1890, and January 1891. These last fed on the mudbanks close to the Railway-Station at Exmouth. The Brent Goose frequently visits the Kingsbridge estuary and Slapton Ley (R. P. N., MS. Notes). Mr. E. A. S. Elliot obtained five on November 2nd, 1891, near Kingsbridge: they were greedily eating the grass-wrack (*Zostera marina*) on the mud. Mr. Gatecombe saw a couple in the flesh at Plymouth on May 12th, 1883 (Zool. 1883, p. 419), and we ourselves shot one, and saw six others, on April 22nd, 1861, on the estuary of the Taw (M. A. M.).

Great numbers of Brent Geese occur some winters at Poole Harbour in Dorsetshire. "Early in February 1879 a great number arrived during the prevalence of a strong east wind, and were very tame; sixty or seventy were shot by three gunners at the mouth of Poole Harbour" (Mansel-Pleydell, 'Birds of Dorset,' p. 139).

These Geese are also numerous off the Cornish coast; large flocks sometimes appearing in Mount's Bay, and great execution being done among them by the shooters with their punt-guns.

Like our other British Geese, the Brent Goose goes very far north to nest.

There are two forms of this Goose which visit the British Islands—one, with the underparts somewhat light-coloured, from the westward, and one, with a darker breast and abdomen, from Novaya Zemblya and the north-east. The latter form predominates on the East Coast of England.

The Rev. Charles Swainson, in his 'Provincial Names of British Birds,' derives the name Brent or Brant from the Welsh *brenig*, Breton *brening*, a limpet; but it seems more likely to come from the Saxon, *brennen*, *brante*—i. e., burnt, in allusion to the black scorched colour of the plumage.

Barnacle Goose. *Bernicla leucopsis* (Bechst.).

A casual visitor, of rare occurrence.

This is another species of Goose which goes very far north to nest, and is a rare winter visitor to our English coasts, being nowhere plentiful, and scarcer everywhere than it was formerly. It is more numerous on the Scotch coasts than it is with us in England, and is a land-feeding bird, very rarely taking to the water, unless persecuted and driven there. In North Devon we once saw a pair in the winter-time at no great distance from the Lighthouse on the Braunton Burrows, but could not

obtain a shot at them. Like the Brent Goose, the Barnacle is usually tame. Some years ago it used to occur almost annually on the north coast of Pembrokeshire. Sir Hugh Owen, who was constantly on the look-out for wild-fowl at Goodwick, near Fishguard, informed us that he generally shot one or two of these Geese, which were in company with the first flocks of Brent Geese arriving on the coast.

There are two specimens of the Barnacle Goose from Devonshire in the collection of British Birds at the Natural History Museum, South Kensington—one from Col. Montagu's collection, the other from that of Mr. Bartlett. Montagu says: "a large flock of these birds were observed in Slapton Ley in the winter of 1801" (Orn. Dict., Suppl.). Mr. Comyns had two specimens shot on Dawlish Warren (E. M., Trans. Plym. Inst. 1830; Mag. Nat. Hist. 1837, p. 330). A pair killed at Slapton Ley were preserved at the Sands Hotel, where we saw them in January 1856, and another pair were shot there in 1860 (H. N., MS. Notes). An example obtained in 1864 in the neighbourhood of Plymouth is in Mr. J. Brooking-Rowe's collection. Mr. S. Square shot one at Thurlestone in the autumn of 1882 (R. P. N., MS. Notes). Four rose from the sea near Thurlestone Rock close to the shore in January 1891 (E. A. S. E.).

In Cornwall the Barnacle Goose would seem to be more often met with than it is in Devonshire. Mr. Rodd states that "little parties now and then appear in hard winters, their black and white plumage rendering them very conspicuous on the wing. Specimens have been obtained in the Land's End marshes, in Mount's Bay, and at Helford." In Somerset the only example Mr. Cecil Smith knew of was the one sent alive by Mr. Anstice, of Bridgwater, to Col. Montagu in February 1809. A few appear occasionally off the Dorset coast at Weymouth and Poole; some were shot in February 1879, and sent to Mr. Hart, of Christchurch, for preservation (Mansel-Pleydell, 'Birds of Dorset,' p. 138).

This species of Goose takes its name from an extraordinary fable which was solemnly accepted by the naturalists of two hundred years ago—that these Geese were hatched from the barnacles which attach themselves to the bottoms of vessels!

* Canada Goose. *Bernicla canadensis* (Linn.).

Introduced, but has occurred several times on the Exe, in the Kingsbridge district, near Plymouth, and on the Taw, apparently in a wild state.

This handsome Goose, almost a Swan in size, is the common Wild Goose of America, whose arrival in the autumn is anxiously expected by sportsmen, to whom the passing flocks afford excellent shooting and large bags. It is so generally kept among the ornamental Water-fowl on lakes in England, that the stragglers which are occasionally shot at large must be set down as English-reared birds, and not as migrants from America. One was shot on the Laira, in September 1855 (J. G., MS. Notes). One killed on the Exe in 1859, and another from Mr. Ralph Sanders's collection, are in the A. M. M. Two were killed near Plymouth in 1860 (J. B. R., Trans. Plym. Inst. 1862-63, p. 76). One was shot by Mr. Ellis on the River Avon, April 3rd, 1867, and is now in the possession of

Rev. W. Pittman, of Aveton Gifford (H. N., MS. Notes). Two were seen in Plymouth Sound, October 29th, 1877; and two were killed, and a flock of ten seen, near Plymouth in January 1879 (J. G., Zool. 1878, p. 53; 1879, p. 206). A son of Mr. H. Square, on returning from school to Court Barton, caught one of these birds on the road in November 1879, which had been injured in some way. It was kept alive in a hen-coop for two days at Thurlestone, and was then killed in order that it might be preserved by Mr. Henry Nicholls (E. A. S. E., MS. Notes).

A specimen of this Goose was shot on the Taw, near Barnstaple, many years ago; and during the severe winter of 1890-91, Mr. Miller, of Barnstaple, shot another at Fremington, on the Taw.

Some years ago we knew of a fine flock of these Geese, twenty or more, which were kept at East Clevedon, in Somerset, where we sometimes saw them flying, with all the appearance of wild birds, over the adjoining level.

In Cornwall specimens of the Canada Goose have been obtained in the winter-time near Falmouth; but none are recorded from Dorsetshire or Somerset, although the last county possessed the flock mentioned above, which, it might be supposed, would have furnished stray birds to the North Somerset mud-flats. Dr. Coles reports that the Canada Goose nests in various parts of the Upper Missouri and Yellowstone regions *in trees*, the old birds carrying the young when hatched down to the water in their bills ('Birds of the North West,' p. 554).

Red-breasted Goose. *Bernicla ruficollis* (Pallas).

An accidental visitor, of extremely rare occurrence. One killed on Dawlish (or Kenton) Warren, at the mouth of the Exe, in 1828, was in the possession of Mr. W. Russell, of Dawlish (E. M., Mag. Nat. Hist. 1837, p. 360). A second was shot on the Teign Marshes, February 21st, 1837, by Rendell, of Buckland (*idem*, l. c.). There have been no recent occurrences in the county.

The home of this very beautiful Goose is Northern Siberia, so that the few stragglers which have visited our shores have had a long flight to reach us. We have never set eyes on either of the Devonshire specimens, but have often admired the very perfect example which belonged to the late Mr. John Marshall, of Belmont, Taunton, and is now in his brother's collection at Norton Manor. This bird was shot at Maldon, in Essex, on January 6th, 1871, and was for some time in the possession of Mr. J. E. Harting.

The Red-breasted Goose is only a very rare straggler to any part of Europe, and little is known about its nesting-habits. There was a live one for some time at the Zoological Gardens, in London, which was very tame, and had much of the actions and habits of the Common Brent Goose (Dresser, 'Birds of Europe,' vol. vi. p. 406).

[A specimen of the Spur-winged Goose, an African species, was shot

near St. Germans, in Cornwall, on June 20th, 1821, and is still to be seen in the Museum at Newcastle-on-Tyne. The wife of the man who shot it cut off its wings for dusters, and then threw the body away! Three weeks afterwards it was picked up covered with mud, one of the wings sewn on to it, and made as presentable a specimen as its untoward treatment allowed (Rodd, 'Birds of Cornwall,' p. 143). The time of the year when this bird was obtained sufficiently indicates that it was an escape from some ornamental water.]

THE SWANS.

The remark we made respecting the winter distribution of the Wild Geese in this kingdom applies with equal force to the Wild Swans, which are, with the exception of one species, Bewick's Swan, far more numerous on the Eastern coasts than they are in the West. The majority of Wild Swans seen flying over our estuaries are merely tame Swans, which often wander away from the rivers and ornamental waters where they reside for the greater part of the year in a semi-domesticated state. The fine Whooper, and the much smaller Swan which has been named after the great line-engraver, like most of the British Wild Geese, find their summer homes in the extreme north of Europe, flying south in the autumn, and passing the winter months in the south-eastern countries of the Continent and in Africa.

* Mute Swan. *Cygnus olor* (Gmelin).

Introduced.

This most beautiful, graceful, and elegant bird, to whose history alone in this country a most interesting volume might be given, has generally been supposed to have been introduced to our lakes and rivers by the Romans, to whom we owe also our English Pheasant. It is justly considered the greatest ornament among our aquatic fowl, and in old days was served at great banquets, and was regarded as a royal dish. In the third volume of that most interesting work, 'The Birds of Norfolk,' is a long account of the Norfolk Swans, in which we read of the "Swan Pits" at Norwich, which still exist, in which the Cygnets are kept

and fattened for the table. A fine young Swan, of 15 lbs. weight, must form a grand dish to set before a dinner-party; we have never ourselves had the luck to partake of one, but we have had the evidence of those who have feasted upon examples of Bewick's Swan, of the excellence of the meat. Considering how prone tame Swans are to wander away from the swanneries, and the extensive breeding-places which exist in the West of England, it is not a little remarkable that so few Mute Swans should be observed at large in the winter-time in the sheltered estuaries of our Devonshire coast. We have only once or twice seen Swans, which we considered were only Mute Swans, when we were after wild-fowl on the Barnstaple river, and the instances of their occurrence are not numerous even on the southern, and more favoured, shores of the county. Now, the celebrated swannery at Abbotsbury, on the Dorset coast, where there is a stock of several hundred Swans, might well be expected to furnish many stragglers to such close adjoining waters as the mouth of the Exe, Slapton Ley, &c.; and on the north coast we might imagine that we should be not unseldom visited by Mute Swans straying across the Channel from a great resort of Swans at Stackpole, Lord Cawdor's beautiful seat on the south coast of Pembrokeshire. Here the extensive lake is at one end only separated from the sea by a narrow belt of sand-hills; and the numerous Swans which frequent it in the summer, directly the weed dies down beyond their reach in the autumn, wander off almost to a bird. A few are then shot as "Wild Swans" on the shores of Milford Haven and on the adjoining marshes, but the greater number disappear entirely and must have flown off towards the south. In answer to an inquiry respecting the Swans at Stackpole Court, Lord Cawdor kindly wrote as follows, under date November 9th, 1891:—"The Swans come and go as they please. I never introduce any fresh blood. A few weeks ago there were above ninety here; to-day there are not ten, because the water has risen and the American weed is out of their reach. They will, I doubt not, return when the water falls. The American weed, after twenty-five years, has begun to diminish, and has almost died out in some parts of the water. The Swans go up and down Milford Haven, and, I daresay, some of them go across to Devonshire." When we resided at Bishop's Lydeard, in the west of Somerset, we were near to several large sheets of ornamental water on which tame Swans were kept, and it was the practice of these birds to visit the various waters in turn, so that it was quite a common sight to see a small string of Swans passing overhead, and to hear the musical clang of their wings, as the Sandhill Park Swans flew up to the lake at Cothelstone Park, or were making eastwards for the smaller water at Tetton House.

A considerable number of Swans formerly lived on the estuary of the Exe between Countess Weir and Topsham, a pair or two nesting yearly in the reed-beds. Up to 1856, we used to see twenty-five feeding together in one spot outside the river-wall at Newport House. They were constantly to be seen and heard flying up and down the river, and their musical flight was a source of much gratification to lovers of birds. As they lived in a state of perfect freedom, they frequently flew away to long

distances from the Exe, and were often shot as "Wild Swans." From an absurd idea that they destroyed the salmon-spawn their numbers have been greatly reduced by the fishermen, and now only a few pairs remain. Some are kept on ponds and ornamental waters throughout the county, in a domesticated condition. On June 21st, 1881, a female Swan, five feet in length and weighing $24\frac{1}{2}$ lbs., was brought to us. She had broken her neck by flying against a telegraph-wire at Cowley Bridge, near Exeter; she had eight cygnets at the time. When we were very young there was much talk in the neighbourhood of Topsham about some Swans that had been killed with silver collars round their necks. This must have happened in 1836 or 1838, we think.

Under the name of the Polish Swan (*Cygnus immutabilis*, Yarrell), Mr. Yarrell described a beautiful Swan, apparently differing somewhat from the Mute Swan, which was found invariably to have its cygnets pure white, while the Mute Swan has them grey. As this White Swan has been met with nowhere else except on the British coasts, and its habitat has not been detected in any part of the world, ornithologists are very doubtful if it is more than a variety of the Mute Swan; and in the 'Field' for October 17th, 1891, Mr. A. D. Bartlett, of the Zoological Gardens in London, while writing on the subject of albinos, instances the Polish Swan of Yarrell as a remarkable example of semi-albinism in the Common Mute Swan. It is probable, therefore, that this puzzling Swan will henceforth be regarded as only an albinism of the common bird.

Whooper Swan. *Cygnus musicus* (Bechst.).

A casual visitor of rare occurrence, and only in severe winters. Poulshole, in his 'History of Devon,' vol. i. p. 111, states that in 1788-89, the River Exe, and the Exminster Marshes, and banks of the River Clyst were covered with Swans, but of what species he does not say. In January 1830, many Wild Swans were brought to the markets in Plymouth and Devonport, and in the same year some were obtained in the north of the county (E. M., Trans. Plym. Inst. 1830; Mag. Nat. Hist. 1837, p. 360; and T. J., Bray's 'Tamar and Tavy'). Mr. Henry Nicholls writes: "in a severe winter some fifty years ago, I saw a flock of nineteen [Whoopers] in the Kingsbridge estuary, near Gerston Kiln. Many were obtained, and passed through my hands. I saw three hung up in the kiln on the Quay, which had just been shot by a man called Pepperall." Some were shot on the Kingsbridge estuary in the winter of 1860, and one on Slapton Ley in the winter of 1866 (R. P. N., MS. Notes). Two Swans were seen flying up the River Tamar, January 19th, 1877 (J. G., Zool. 1877, p. 163), and were probably the same as two Wild Swans killed in Cornwall soon afterwards. One was killed on the Yealm in January 1881 (Zool. 1881, p. 196). Two are said to have been shot at Bude. Seven were seen in Torbay in January 1891. One was killed at Slapton about the same time, and is now in the Torquay Museum (W. E.).

This fine bird is very rare indeed in Devonshire, in the north of the county especially, where we do not remember that we have ever seen a specimen. Several Swans were shot on the Barnstaple river in the severe winter of 1890-91, and one of these is said to have been a Whooper, but we have no knowledge that the identification was correct. In Cornwall, Mr. Rodd can only speak of three specimens, and from what he states about them there can be no doubt that these birds were not Whoopers, but only stray domestic Swans. On the Dorset coast the Whooper occurs more frequently, and Mr. Mansel-Pleydell remarks that it occasionally associates in the winter-time with the tame birds on the Fleet, at Abbotsbury. In Poole Harbour, a classical resort of wild-fowl, Colonel Hawker, many years ago, killed eight at a shot with his punt-gun, and our edition of his celebrated 'Instructions to Young Sportsmen' (Longman & Co., 1826) contains as its frontispiece a view of Poole Harbour, in which a successful shot has just been made from a punt, and lying on the water are dead and crippled Coots, Curlews, and Brent Geese, together with a Swan with a broken wing, while another Swan is making off in an attitude expressive of great astonishment. As two other punts are represented, one blazing away, and the other approaching the flocks of fowl, and retrievers and spaniels are also "all over" the picture, one can only wonder at the great tameness of Geese and Swans in those days, so very different from our own experience in these degenerate times! Mr. Mansel-Pleydell adds that most of the "Wild Swans" obtained in more recent years in Poole Harbour must be ascribed to straggling Mute Swans. In the county of Somerset the Whooper is exceedingly rare. Mr. Cecil Smith only knew of the one which was sent from Bridgwater to Col. Montagu by his friend Mr. Anstice, in 1805, and conjectures that a Swan, shot many years ago (in 1829) out of a pair which appeared on his own pond at Lydeard House, may probably have been a Whooper, although we concur with him in thinking that it was more likely an example of Bewick's Swan, a far more common species in the West of England. We ourselves know of no Somerset Whooper, and the specimen in our own collection was shot on the Thames, in the first or second year of the Rifle Volunteer movement, by a volunteer, who cleverly sent a bullet from a "long Enfield" through the bird's neck. This bird followed us about in a hamper from one place in Devonshire to another, as we chanced to be on a round of visits at the time, and when we at last unpacked it had been killed close on three weeks, and the work of skinning and mounting it was rather a gruesome task!

Bewick's Swan. *Cygnus bewicki*, Yarrell.

A casual visitor, of very rare occurrence in severe winters.

Dr. Thos. Shapter, in his 'Climate of the South of Devon,' speaks of some having been obtained in 1830. Fifteen occurred in a flock on the Exe and Clyst, January 24th, 1838, and nearly all were killed. They weighed from 14 lbs. to 20 lbs. (F. W. L. R., MS. Journal, i. p. 74). One shot on

the Dart is in the Torquay Museum. A pair were seen November 14th, 1876, on the Kingsbridge estuary, and the female, weighing $11\frac{1}{2}$ lbs., was shot (H. N., Zool. 1876, p. 5180). Another was shot and brought to Mr. R. P. Nicholls a few days afterwards, but was not preserved.

Although only to be considered a rare visitor in the winter-time, and appearing at uncertain intervals, Bewick's Swan is, nevertheless, the most common of the species of Wild Swan in the West Country. In Ireland Mr. Thompson said it was more often seen than the Whooper; we knew of many instances of its occurrence in Pembrokeshire, and our own specimen comes from that county. In Cornwall, according to Mr. Rodd's brief note, it would seem to have been occasionally confounded with the much larger and rarer Whooper, and Mr. Rodd's collection had examples which had been procured in his county; while in Somerset it has several times been met with in considerable numbers. In the winter of 1878 there was a large visitation of these beautiful Swans to the West Somerset Moors. We quote our own notes communicated to the 'Zoologist' at the time ('Zoologist,' 1879, p. 173):—"Our friend, the Rev. R. C. L. Browne, Vicar of North Curry, who was greatly interested by the visit of a flock of Bewick's Swans to the moors in his parish, has given us the following particulars:—The flock numbered about sixty birds, and frequented the neighbourhood of North Curry for a month. The birds were remarkably wary, and although many gunners were on the watch for them, only one succeeded in obtaining a shot. The Vicar himself spent a moonlight night on a frozen rhine, lying up for the Swans, but although they often shifted their ground, they did not come within reach of his duck-gun. A labourer, with his single-barrelled gun, had greater luck, coming on them unexpectedly, and succeeded in knocking over four; of these two were picked up, while the other two, being but slightly wounded, managed to escape. One of the two obtained was sold to Mr. Foster, of North Curry: the other the Vicar was anxious to secure, but arrived at the man's cottage just as he and his family were sitting down to a dinner off roast Swan. A slice from the breast, although both juicy and tender, was but a poor equivalent for the loss of what would have been prized as an extremely interesting local specimen. During the day the Swans flew about from one 'washet' to another, as the open places in the ice on the 'grounds' on the moor are termed locally. The birds passed overhead in a wedge-formation, uttering musical cries, and as they alighted hovered for an instant with uplifted wings above the ground, when they 'looked like a descending flight of angels.'" A smaller flock, numbering sixteen appeared on the southern edge of the moor in the neighbourhood of Glastonbury. Of these, four were procured, as stated by Mr. Porch in the 'Field,' February 22nd, 1879. Two of these were presented by that gentleman to the Museum at Taunton Castle, and were a valuable addition to the collection of county birds. One was a remarkably fine adult; the other, almost an adult, had a little rust colour on the forehead and breast*.

* This tinge of rusty yellow, which is often noticed on the front of the head of Swans, is supposed by some ornithologists to be merely the stain occasioned by the

Museum, informed us that both examples were females. Our own parish, under the Quantocks, received a visit from these elegant little Swans. We are told by Mr. Esdaile that four were seen for several days on the lake in his park at Cothelstone, and that before the birds left him their numbers were increased to seven. One was either a wounded bird, or had received a severe handling from the tame Swans on the lake, for it fell a prey to a prowling fox and was found half-eaten on the bank. The head, that of an adult, was presented to Mr. Cecil Smith. One of the four Swans obtained near Glastonbury, being only slightly wounded, was kept alive for some time with other fowl, and soon became tame, thus bearing out what has been frequently recorded of the domesticity of this species. A friend of ours when Snipe-shooting on the moors to the east of Taunton came across a small flock of Bewick's Swans, and had an ineffectual shot at them. He was struck by their small size, and said that they seemed more like Wild Geese than Swans. Some Brent Geese appeared on the same "ground" * when the Swans were noticed, and two were shot at a spot considerably inland for a bird which usually confines itself to the coast.

We have no knowledge of any specimens of Bewick's Swan from North Devon. According to Mr. Mansel-Pleydell, it is very rarely obtained in Dorsetshire, but may have been seen and taken for "Common Wild Swans."

[*Observations.*—Two specimens of the Australian Black Swan (*Cygnus atrata*, Lath.) have been killed on the Exc. One was shot off Exmouth in October 1885 (Zool. 1855, p. 6447), and is now in the A. M. M. The second was killed about 1869, and was seen by us in the flesh. Both birds were probably wanderers from Bicton Lake, near Budleigh, where many foreign aquatic birds were kept in a semi-domesticated condition. Had specimens been obtained oftener, this Swan would have as good claim to be considered part of our fauna as an introduced species as the Mute Swan, Egyptian Goose, &c.

The American Trumpeter Swan (*C. buccinator*), a larger species than the Whooper with a black bill, has long been naturalized in England, and has been killed, apparently in a wild state, near Aldeburgh; and another North-American species, the Whistling Swan (*C. americanus*), is said to have been occasionally killed in Scotland. It has small patches of a deep orange-colour on the sides of the bill.]

decaying weeds into which the birds thrust their heads while feeding, or from some mud or sand impregnated with iron with which they have come in contact. There are some very interesting remarks on this subject in the 'Birds of Norfolk,' vol. iii. p. 76.

* On the Somerset fens a "ground" is what would elsewhere be termed a field, only it is separated from the adjoining grounds by deep ditches, full of water, with an unknown bottom of mud, instead of by hedges or walls.

THE WILD DUCKS.

Of the numerous Ducks which come upon our British list some are maritime, like the Sheldrake, the Scoters, and the Scaup, and, except at the nesting-season, very rarely leave the salt water. There are others which pass the greater part of the year on lakes and streams inland, which only make their appearance on the estuaries on the coast in the autumn and winter; of these the best-known examples are the Common Wigeon and the Teal. Even the ordinary Wild Duck, generally confining itself to freshwater ponds and rivers and marshes, will in the winter-time, for the sake of security, fly out to sea to settle for the day and sleep upon its surface, seeking the shore and its favourite feeding-grounds at dusk. The Garganey, or Summer Teal, a rather scarce spring visitor to this country, is the only one of whose appearance at any time on salt water we have no instance. Most of the British Wild Ducks have been obtained in Devonshire: some of them are very rare and only accidental stragglers from the north, such as the Eider and Long-tailed Duck; some reach us from the south of Europe, like the Red-crested Pochard and White-eyed Duck; while others are drifted to us by accident across two continents, perhaps coming all the way from North America, *viâ* Northern Asia and Europe, as the Surf-Scoter, the American Green-winged Teal, and the Buffel-headed Duck. Of our own indigenous birds, the best known representatives of the Wild-Duck family, and the only ones we are accustomed to see hanging up in game-dealers' shops, the Common Wild Duck, the Common Wigeon, and the Teal, it may safely be asserted that not a tithe of the numbers, which, fifty years ago, were sometimes seen blackening the sands and oozes on our coasts, visit us at the present day, and

that each succeeding year their numbers grow less and less. The Ducks are nearly all nocturnal feeders, sleeping by day on the middle of some quiet lake, or on some sheltered stream, flying to their feeding-grounds in the evening. There is a great difference between the plumages of the two sexes in some of them, the drake being decked with a variety of bright colours, while the duck, for the sake of protection while she is incubating her eggs and taking charge of her young, is clad in inconspicuous brown and russet. Directly the breeding-season is over a rapid change takes place in the brilliant livery of the drake, and a dingy plumage, somewhat resembling that of his spouse, is assumed; and this "eclipse" stage, as it is called, is, doubtless, also connected with protective purposes, serving to guard the bird during the utter helplessness occasioned by the summer moult, during which all the flight-feathers are shed, and the drake, a short time since so proud in his splendid dress and strong powers of wing, is compelled to pass weeks sheltering among the sedge and reeds, from whence we have had examples, incapable of flight, occasionally brought to us by our retrievers. By October the moulting-stage has been fully passed, and the drakes have once more assumed their brilliant plumage. We believe this curious change during the summer in the plumage of the drake is experienced in all those species in which in the adult birds there is a conspicuous difference in the dress of the two sexes.

Common Sheldrake. *Tadorna cornuta* (S. G. Gm.).

[Burrow Duck (*N. D. and Somerset*).]

Resident in very limited numbers, but mainly a casual visitor in winter and early spring.

This very handsome Duck still breeds on the Braunton Burrows in

North Devon, and we know of several breeding-stations on the north coast of Somerset, between Minehead and Clevedon. The Burrow Duck, as it is generally called, is a very conspicuous object on the sands, when the sun is shining on its handsome white and rich chestnut plumage, and is one of the most wary of all Water-fowl to approach. However, one rough afternoon when we were walking on Brean Down, near Weston-super-Mare, we came close on thirty or more of these beautiful birds, sheltering on the leeward side of the Down, and as they did not perceive our presence, had a good look at them before we continued our walk and left them undisturbed. One summer's afternoon we were seated among the fern on a sloping edge of the Down above the sea, and after a time felt a curious pecking at our legs, and slightly shifting our position in order to discover our assailant, in so doing afforded an escape to a Burrow Duck sitting upon her eggs placed inside a wide-mouthed rabbit-earth, and were considerably startled by the bird as she flew out from under us towards the water. The Burrow Ducks feed very early in the morning on the grass, clover, and young wheat-fields adjoining the cliffs, but directly the farm work-people make their appearance they retire to the water. Being desirous of studying the habits of these Ducks, we have left our home at 2 A.M. on fine mornings in May and June, when we were residing at Weston-super-Mare, in order to walk to Wood-spring Priory, a farm on the coast, some four miles to the east of that watering-place, where, at that time, considerable numbers of these Ducks nested. By careful stalking we have many times approached close to the birds when feeding. Directly the young are hatched, the old birds carry the little ducklings to the water in their bills; and we have seen broods only a day or two old swimming briskly along below the cliffs with the two old birds in attendance. Noticing that the Ducks had a certain line of flight along the coast, and that they frequently passed to and fro over a particular patch of furze, we one morning in the autumn took up our station there, and succeeded in shooting several, but have never fired at a Burrow Duck since, as those we attempted to eat were utterly unpalatable, although we tried them in various fashions. We have had no recent information respecting the Burrow Ducks near Weston-super-Mare, and are quite unable to say if they are still as numerous as they were a quarter of a century ago: we fear not.

At Plymouth the Sheldrake seldom occurs excepting during or after very severe weather (J. G.). It was unusually numerous in 1875, and Dec. 1890 to Jan. 1891, on the south coast of the county. At Plymouth a pair were shot Jan. 21st, 1855, and one Jan. 19th, 1870 (B., MS. Notes). Three at Plymouth Market, Jan. 9th, 1875; two in Devonport Market, Feb. 13th, 1875; some Nov. 1875; one Feb. 13th, 1877; another Nov. 5th, 1877; some November and December 1879; one 1883 (J. G., Zool. 1875, pp. 4373, 4448; 1876, p. 4784; 1877, p. 164; 1878, p. 54; 1880, p. 48; 1884, p. 56).

Several have been shot in Kingsbridge estuary (R. P. N.). A very large male was shot there at the end of 1875, and two others seen (E. A. S. E.). A fine adult male was shot near Kingsbridge in January 1891 (R. P. N.). A flock of about ten came into the estuary before Christmas 1890, and most were shot (E. A. S. E.).

One occurred at Teignmouth, Feb. 1855 (J. G., MS. Notes). An adult female at Brixham, Feb. 15th, 1870 (Zool. 1870, p. 2098).

On the Exe estuary the Sheldrake has occurred at the following dates:—February 1853; Dec. 28th, 1864; March 15th, 1869 (C. S.); three in March 1870; Feb. 26th, 1875; Dec. 12th, 1875; four Jan. 27th, 1881; a young bird Sept. 1889; many adults Dec. 1890 and Jan. 1891. Most of these specimens were obtained on Dawlish Warren at the mouth of the Exe. The sand-hills there form a suitable breeding-ground, and one pair has nested there annually for the last few years and brought out broods. For some reason this species is evidently on the increase, and occurs more frequently, and in greater numbers, on the South Coast than formerly.

The name of the bird is taken from “*sheld*,” an old word signifying “*pie*,” in reference to its parti-coloured plumage.

Burrow Ducks are to be seen on the coast at all times of the year near the places where they nest. However, in Cornwall, Mr. Rodd considered this species a winter visitor, only to be seen in severe weather. On the Dorsetshire coast the Burrow Duck is not uncommon, and breeds in some numbers, where there are sand-hills, and Mr. Mansel-Pleydell quotes some interesting notes on the bird from Colonel Hawker’s well-known book.

[Ruddy Sheldrake. *Tadorna casarca* (Linn.).

In the severe winter of 1890–91, a specimen of the Ruddy Sheldrake, which we can only consider to have strayed from some ornamental water, where it had been frozen out, was obtained at Braunton, in North Devon. A man fired at it and wounded it, and several days later it was picked up dead, and carried to Mr. Rowe, the Barnstaple bird-stuffer, from whom it passed to the Museum at Westward Ho! College. The Ruddy Sheldrake is a native of South-eastern Europe and Northern Africa, and is a bird not to be expected to wander as far as our coasts of its own accord. As far back as the severe winter of 1776, one was shot at Bryanston, in Dorsetshire, and is still to be seen at the Museum in Newcastle-on-Tyne. This example was, most probably, also an escaped bird.]

* Summer Duck. *Æx sponsa* (Linn.).

Introduced. This pretty American species is frequently kept on ponds and ornamental waters, and as it breeds freely, and roams about the country at will, it appears to us that it is as much entitled to a place in the British list as other introduced and naturalized species, such as the Egyptian Goose, Mute Swan, and Pheasant. All these would soon be exterminated did they not receive protection, and are not really *feræ nature*. Two specimens of the Summer Duck were killed out of a flock of fourteen on the River Erme, near Plymouth (J. G., Zool. 1873, p. 3396). A female was shot by Mr. Walter Toll at Slapton Ley in Dec. 1890.

Wigeon. *Mareca penelope* (Linn.).

A winter visitor, abundant in some seasons. It continues to be by far the most plentiful species of Duck met with in Devonshire, as it was when

Montagu published the supplement to his 'Ornithological Dictionary.' About thirty-five years ago, whenever the Clyst marshes were flooded, in rainy weather, during the winter months, they were visited by large flocks of Wigeon. But now these marshes are occupied by the Rifle-Butts of the Clyst Valley Range. Some even now occasionally visit the Exe estuary, the Kingsbridge arm of the sea, and the creeks in the neighbourhood of Plymouth. Thousands are seen on Slapton and Thurlestone Leys in winter. This bird occasionally arrives as early as the beginning of September (one Sept. 10th, 1851, on the Exe; six on 12th, and fifteen on Sept. 17th, 1853, also on the Exe). Mr. Gatecombe, however, considered Sept. 23rd as an early date (Zool. 1873, p. 3785). In severe winters we have seen large flocks on the ooze of the Exe estuary in the daytime, and in the Clyst marshes; but more generally they only venture inland at night, resting out at sea, or on the freshwater leys on the coast, during the day. Many are shot during their flight-time at night by the gunners on the Kingsbridge estuary when flying to their feeding-grounds, a waning moon being considered most favourable for the sport (E. A. S. E.). The flocks are mainly composed of birds of the year, and females, up to the end of November; but in January and February adult males are most numerous. They take their departure in March. A bird intermediate between the Mallard and Wigeon is mentioned by Bellamy (Nat. Hist. S. Devon, p. 217, note).

The Wigeon arrives on the North Devon coast towards the end of September, generally making its first appearance in small flocks, which probably represent single broods. When the Wigeon are first seen on the estuaries they are usually pretty tame, and are not difficult to stalk, but as the season advances the flocks collect together and become more wary. One day in the late autumn we saw the sands adjoining the Braunton Burrows on Barnstaple Bay looking quite black from the multitude of Wigeon, but there was no approaching them. In severe weather in the winter these Ducks become very poor, and from feeding on the mud contract a rank flavour; but after getting nothing but these indifferent birds for some time, we have known fresh flocks to arrive suddenly of plump birds, in far brighter plumage, and excellent for the table; and have considered them to have been Wigeon which had only then been frozen out from some freshwater feeding-grounds. As long as the weather is open these Ducks feed largely upon grass, which they crop close with their beaks, and while they continue to do this their flesh remains sweet; but when they have to depend chiefly upon the worms, and whatever else they can gather from the oozes on the shore, they rapidly deteriorate in flavour. Although a few Wigeon nest in the north of Scotland, the great majority are reared in the northern countries of Europe, migrating south on the approach of autumn. In old days the takes of Wigeon on the large decoys in the eastern counties were enormous, and where decoys are still maintained the Wigeon which are secured greatly outnumber all the other fowl.

Towards the end of April 1870, we received information from the Rev. W. S. Hore, then residing at Barnstaple, that a very curious Wigeon had

been shot on the Taw, and brought to the bird-stuffer, which he thought might possibly prove to be an example of the *American Wigeon*, *Mareca americana* (Gm.). Shortly afterwards this bird was forwarded to us, and quite a conclave of ornithologists of repute, who then chanced to be in our neighbourhood, sat upon it, and pronounced it to be, without doubt, a specimen of the *American Wigeon*, and we accordingly labelled it as such, and until quite lately felt no suspicion that it was anything else, even after comparing it with adult skins of the American species in our possession. But being unwilling to record this specimen in our book, if there was the least doubt about it, we took it recently to the South Kensington Museum, where, with Dr. Sharpe's kind help, we were able to compare it with skins and mounted examples of the American Wigeon in various stages, with the result that we were quite satisfied that our bird was, after all, only a Common Wigeon in a very abnormal condition of plumage. What seemed to us an unfailing distinction between the American and the Common Wigeon was the head and throat of the latter being *spotted* in all stages, whereas the same parts in the former are as invariably *striated*.

The following interesting description of 'flight-shooting' for Wigeon is from the pen of Mr. Edmund A. S. Elliot of Kingsbridge, who has kindly allowed us to use it for this work :—

"WIGEON! the very name excites one, and many a success and failure in pursuit of Master Yellow-Poll occurs to one, and many a tragic incident, at any rate as concerned our quarry. Now the traffic on the Estuary has so much increased, flight-shooting is not what it used to be fifteen or twenty years ago; and the favourite method now is to get a pot-shot by going down undercliff at night, as the tide is rising at the same time that the moon is waxing: lying up, and waiting till the fast-disappearing mud-banks drive the hungry birds towards the shore in search of food. Many are thus obtained at a shot, and one gunner—and a most enthusiastic one to boot—often gets eight to twelve with the aid of an eight-bore, and a clever terrier, which retrieves the birds, sometimes bringing in two at a time.

"Flight-shooting, however, has greater charms; there is not that long, long, wait in the cramped-up position one has to adopt for the most popular method of obtaining birds, but taking a stand under shelter of a hedge on the east side of the Estuary, where the birds pass over on their way from Slapton Ley, shooting may be obtained from twilight till after dark. Many a time have I stood thus, with not a sound to break the stillness of the night, except the weird croak of the Heron, or shrill cry of the Curlew, as they are driven off their feeding-ground by the incoming tide; presently a 'whee-au, whee-au,' and a swish of wings, proclaim the advent of Wigeon, and, almost before one can wink, the birds have passed and are out of shot. Now the calls become more frequent, and one knows the birds are arriving thickly, but rather out of one's line; but see against the rising moon there comes a bunch—look out overhead and let drive! ere like a flash they have passed too far—thud, thud, is echoed to our

shot, as the birds drop dead or crippled on the beach beneath, and the next moment our faithful retriever is hard at work over the cliff.

“An incident, which nearly led to a tragic end, occurred as I was once retrieving a wounded Wigeon over the soft, treacherous mud. I got a long shot at some birds over the mud, and wounded one which I immediately went in pursuit of, gun in hand; the wounded bird could run quite as fast as I could flounder through the mud, knee-deep as it was at every step. Presently, down I went up to my middle in a soft place, and struggle as I would, I could not get my legs free. After trying in vain to get clear, until, in fact, my strength was exhausted, I realized my precarious position, as the tide was flowing fast, and night was drawing on. My shouting drew no response, nor the rapid firing of my breech-loader the help so urgently needed, and no boats were passing up or down the river, yet there, in the too near distance, I noticed the rippling tide fast approaching. Some method of extricating myself must be thought of, and that quickly; when suddenly, as by an inspiration, a similar scene came before me, which I had read of in my *vade mecum*, ‘Daniel’s Rural Sports,’ where the gunner had saved himself by using his gun as a lever, thus dragging the lower part of his body out, and rolling to the harder edge. Fortunately, this manœuvre was successful in my case, and not a moment too soon, for the tide was now up to me, and I had to swim the lake, gun in hand, to reach the shore.”

Pintail. *Dafla acuta* (Linn.).

[Pheasant Duck, Sea-Pheasant (*N. D.*).]

An occasional winter visitor to our bays, estuaries, and rivers, and much less frequently obtained now than formerly.

This elegant Duck is now one of the rarest of the fowl met with in North Devon, where many years ago it must have been not uncommon, as it was well known to the boatmen at Instow by the name of Sea-Pheasant. We can only remember a single example, and that a Duck, occurring on the Barnstaple river. One or two have been brought, at different times, to the Barnstaple bird-stuffer.

Mr. E. H. Rodd states that the Pintail is not rare as a winter visitor to the Land’s End district, and mentions a wonderful shot made by a farmer in 1853, who, discharging both barrels of a heavy Duck-gun from his shoulders into a large flock of Pintails, picked up thirty-seven Pintails and one Wigeon! We never saw a Somersetshire Pintail; but Mr. Cecil Smith thought the species visited the county regularly every winter, and states that in the winter of 1868–69 it was unusually common. On the Dorsetshire Coast Mr. Mansel-Pleydell considers it a regular winter visitor in small numbers.

The Pintail is widely distributed over the world; prefers quiet inland waters; and is always a shy and wary bird. The adult drakes, in their full spring plumage, are very handsome, and we have seen beautiful spe-

cimens hanging up in Leadenhall Market, which had, no doubt, been sent over from the Continent.

The Pintail is very scarce near Plymouth. One was shot on the Tamar in 1853 (J. B., 'Naturalist,' 1853, p. 204), and another shot on Jan. 17th, 1861, was the only one received by Bolitho in twenty years. A pair obtained in Plymouth Market were shot on the Tamar in the winter of 1862 (J. B. R., Trans. Plym. Inst. 1862-3, p. 78). There were others in the Market in Dec. 1879 (J. G., Zool. 1879, p. 48).

Many are shot on Slapton and Torcross Leys every year, mostly immature birds, but some fine-plumaged males have occurred. A male and female were shot on Kingsbridge estuary, Oct. 15th, 1889; the male was still in the "eclipse" stage (E. A. S. E.).

Pintails were numerous on Torbay in the winter of 1868-69 (Von H., Zool. 1869, p. 1720).

There are several specimens in the A. M. M., obtained on the Exe. Mr. Ross records a male and a female shot on that river in 1844 (MS. Journal, iv. pp. 43, 64). An adult male was killed on the Exe, Oct. 9th, 1855. One was shot at Nether Exe, near Stoke Canon, in Jan. 1881. A fine adult male was obtained at Exmouth, Dec. 17th, 1890.

The Pintail is a winter visitor to Lundy Island.

Wild Duck. *Anas boscas*, Linn.

Partially resident, many breeding in a few suitable localities in the county where they are protected and in other retired situations. It is marked as breeding on Dartmoor by Dr. E. Moore (Rowe's Peramb. Dartmoor, p. 232). Scores breed at Slapton Ley, and many up the Avon valley and at Thurlestone Ley. A great number are shot in the corn-fields at harvest-time all along the adjoining coast, as we are informed by Mr. E. A. S. Elliot. Many appeared on the Kingsbridge estuary on August 1, 1889, probably driven off the Leys (E. A. S. E.), and a few sometimes occur on the Exe in summer and early autumn. The Wild Duck is very plentiful as a winter visitor on the south-west coast, immense flocks being seen in Bigbury Bay, especially under Bolt Tail, where they rest by day, flying inland to feed at night.

White varieties have been shot near Exeter and Plymouth. A female with a white band on the front part of the neck was shot near Topsham, and we have seen other similar specimens. Varieties of different colours have been procured in winter near Kingsbridge (R. P. N.) and on the Exe estuary. A very curious variety of the male, without the white collar, and with very little rufous on the breast, the speculum of the wing being pale black, and the head of a yellower green than usual, was shot below Topsham, on the Exe, early in January 1877 (W. D'U., Zool. 1877, p. 107).

As before mentioned, in our account of the Wigeon, a hybrid between the Mallard and Wigeon was procured by Pincombe of Devonport (Bellamy, Nat. Hist. S. Devon); and the Rev. W. S. Hore obtained a hybrid between the Mallard and the Teal, which is now in the possession of Mr. J. H. Gurney.

We cannot say that the Common Wild Duck is at the present day a numerous species in general on our Devonshire waters. Unless the winter is severe enough to send us flocks from the northern parts of the kingdom,

or from the Continent, but very few are seen, excepting on the south-west part of our coast, where it is abundant and increasing owing to the Bird Preservation Act. We have now no decoys in the West Country, in which hundreds of Wild-fowl are snared every winter, as they are still in some few favoured places in the Eastern Counties; and, indeed, the Wild Ducks do not visit us in sufficient numbers to render a decoy, if constructed, profitable enough to work. A few pairs of Wild Duck breed by the sides of some of our most remote trout-streams, where we have now and again come across the broods when fishing. Wild Ducks are known to place their nests occasionally in strange sites; we once found one on the top of a bank, by the side of a dusty road, on the top of a high hill in the Exmoor country, at least a mile from the nearest stream, which was in the valley far below. We have known very fair bags of Wild Duck made flight-shooting by the sides of the shallow rush-fringed pools on the Braunton Burrows, where the sportsman, sitting on a plank, placed in the midst of the tall clumps of the spiked rush growing nearly five feet high *, could often obtain a favourable shot at the flocks coming in from the sea to feed, either as they flew past, or after they had settled on the water, and we have known one keen shot get upwards of a hundred in this manner in the course of a few evenings.

In severe winters immense flocks of Wild Duck visit the marshes of the Land's End district, according to Mr. Rodd; while numbers which had been bred in the county assemble in the creeks of Poole Harbour, in July, on the Dorset coast, soon to be shot down or scared away by the gunners.

Mr. Mansel-Pleydell mentions two decoys in Dorsetshire, one at Abbotsbury, belonging to Lord Ilchester, of very ancient date, where about 200 birds is the present average take; and another at Morden, belonging to the Charborough Park estate of Miss Drax, where at one time from 7000 to 8000 Wild-fowl were captured in a season, but where none are taken at the present day, the decoy being out of order. In Somerset we never found the Wild Duck very plentiful, either on the peat-moors, where a few pairs probably still nest, or on the coast.

Gadwall. *Chaulelasmus streperus* (Linn.).

A casual winter visitor of very rare occurrence, which has been met with only on the south coast. Dr. Moore records specimens in the collections of Messrs. Drew, Bolitho, and Pincombe, but says it was very rare (Trans. Plym. Inst. 1830; Mag. Nat. Hist. 1837). One was obtained at Plymouth, March 3, 1855 (J. G., 'Naturalist,' 1855, p. 144; Zool. 1855, p. 4705). There are examples in the Torquay Museum from Kingsbridge and the Dart; and one in the A. M. M. is said to have been obtained at Powderham, on the estuary of the Exe, in Dec. 1871. This bird was in a stale condition when received in the flesh, and might have been

* *Juncus acutus*, a scarce rush, of which some splendid clumps exist in the Braunton Burrows.

imported. A young male, shot on the Exe, from Mr. Robert Cumming's collection, is also in the Exeter Museum. One shot at Seaton in December 1882 is in the possession of Mr. Parkins of that place. A female, killed at Slapton Ley in January 1885, believed to be the first recorded specimen obtained in that locality, was in the collection of the late Mr. W. Bastard (R. P. N., Zool. 1885, p. 68, and MS. Notes). The two females recorded as having been shot near Kingsbridge during the winter of 1887-88 appear to be, without doubt, immature Pintails.

The Gadwall is so widely distributed over the world that it is not a little remarkable that it should be so seldom seen in the West of England. It is not uncommon as a winter visitor in Scotland, and being now semi-domesticated in large numbers in the Eastern Counties of England, it might be expected to reach Devonshire occasionally. It is, however, one of the rarest of our Ducks. We know of no instance of it in North Devon; the only Devonshire examples, which we record above, were all obtained on the south coast of the county. It is equally rare in Cornwall, where Mr. Rodd knew of only three having occurred. Mr. Cecil Smith records two from Somerset in his book, and in the 'Zoologist' for 1889, p. 149, mentions a duck and drake Gadwall which were seen in Sedgmoor, near Langport, on Jan. 10, 1889. The duck was shot, but the drake escaped. A drake of this species had been shot near the same spot three years before. Mr. Mansel-Pleydell, who states that it is called locally the "Grey Duck," mentions nine Dorsetshire specimens, most of them from Poole harbour.

In its habits the Gadwall is said closely to resemble the Common Wild Duck.

Garganey. *Querquedula circia* (Linn.).

[Summer Teal.]

A passing visitor in March and April, of occasional occurrence, generally in pairs, but sometimes in small flocks. It is most frequently met with in the southern part of the county, and very rarely visits North Devon. The spring of 1870 was remarkable for the number of Garganeys which visited the county.

Dr. E. Moore mentions one in Mr. Tripe's collection at Devonport, and another shot on the Exe in that of Mr. Comyns (Trans. Plym. Inst. 1830). A young male was shot on the Exe, March 11th, 1841 (F. W. L. R., MS. Journal, iii. p. 49). Mr. Henry Nicholls had a pair shot in Kingsbridge estuary, about 1843 (E. A. S. E.). A pair were killed at one shot in a marsh near Topsham on March 12th, 1850, and are now in the A. M. M. We saw a pair on the Exe close to Topsham, March 17th, 1856, but did not succeed in shooting them. One was shot at Plymouth on March 29th, 1855; and one April 10th, 1861 (B., MS. Notes). A pair in our collection in beautiful plumage were shot on the Taw just above Barnstaple Bridge, about March 20th, 1870, and one was killed on the same river on April 20th following (M. A. M., Zool. 1870, pp. 2144, 2183). A pair occurred at Plymouth, March 25th, 1870, and a male, April 13th, 1872 (J. G., Zool. 1870, p. 2143; 1872, p. 3009). A male was shot at Widdecombe on April 1st, 1870 (A. F. Holdsworth). A pair were shot, and a flock of eight were seen,

at Strode, near Modbury, South Devon, on April 17th, 1875 ('Field' for May 5th, 1875). One occurred at Plymouth, March 24th, 1881 (Zool. 1882, p. 63). There is a specimen from the Teign in the Museum of the Torquay Natural History Society.

We have often considered that there are places on the Somerset peat-moors suitable for this beautiful little Duck to nest in, but have never been able to obtain evidence that any have done so, although we have seen examples which had been shot from these very places we have in our mind. The unfortunate birds, probably, settle on them with an intention of nesting, when somebody catches sight of them some unlucky day, and they are soon to be seen hanging up in the nearest game-dealer's shop, or in the hands of the local bird-stuffer. Mr. Rodd never heard of a Garganey's nest in Cornwall, where the bird appears not uncommonly, and there is no record of a Devonshire nest; but in the 'Zoologist' for 1878, p. 130, Mr. T. M. Pike states his belief "that a brood or two are usually hatched off" in the neighbourhood of Poole Harbour, but furnishes no particulars of any ever having done so. Col. Montagu used to receive specimens of the Garganey from the decoys in Somersetshire in the month of April, by the name of Summer Teal, and gives the weight of a male as about fourteen or fifteen ounces, the weight of a good Woodcock.

The Garganey used to nest on some of the Norfolk Broads, and, possibly, may still do so in a few protected places. It is quite a freshwater Duck, and never visits the salt water, unless it is driven there for shelter. It is a widely distributed species, and does not appear to go very far north.

Common Teal. *Querquedula crecca* (Linn.).

A winter visitor, tolerably numerous in some seasons in suitable localities, especially in the south-western part of the county. Breeds occasionally. The Teal sometimes arrives in August, sometimes early in September. It has been seen on the Exe, September 9th, 1854; at Plymouth, September 16th, 1873 (J. G., Zool. 1873, p. 3784). Many were noticed at Thurlestone Ley, August 14th, 1878 (E. A. S. E.); others at Exmouth, September 1890.

This diminutive Duck is one of the best known of our indigenous wild-fowl, as there are many places where it still nests, and it is a regular visitor in the autumn to almost every river, pond, lake, decoy, and estuary to be met with in the kingdom. The shore-gunner is always pleased to notice the arrival of the first little "bunches" of Teal, as they are generally tame and easily stalked, and at no times are Teal as wild and unapproachable as other wild-fowl. The flesh of the Teal is of high excellence, and it is altogether a nice little bird. Very pretty shooting is afforded by it to the sportsman who has the privilege of following some likely stream of a frosty morning, where the banks are occasionally fringed by reeds, and dwarf willows overhang the water, giving to the birds the shelter they love. And when they are flushed they rarely fly far, even if shot at, and may be marked down again and easily "banked." In our

opinion there is no prettier sport than that to be enjoyed by the side of such a stream as we have before our mind, when, as one advances to each favourite cover, there is the exciting uncertainty as to what may spring, either a Duck and Mallard, a little flock of Teal, or a Wigeon or two, and if the frost be severe, Snipe are sure to be numerous at the edges of the water, and a chance Woodcock may be flushed from some warm cover of mingled rush and bramble. With a good retrieving water-spaniel for a companion, what sportsman could wish for better sport?

We have found pairs of Teal on the Dartmoor bogs in mid-April, and think there may be an occasional nest on the least disturbed places. In trout-fishing in North Devon we have once or twice encountered Teal in the summer-time, which looked as if the birds might have had a nest.

In 1848 a pair of Teal bred near Beesands on Start Bay. A young drake was caught and reared up, which associated freely with domestic Ducks. Teal breed occasionally at Slapton Ley, where, probably, some which had been wounded on "Ley Days" pass the summer, not that we suppose any injured birds ever nest (R. P. N., MS. Notes).

Although the Teal is generally to be met with in small flocks, and occasionally as many as forty may be encountered together, we have sometimes flushed the birds singly from the reeds, or "spires," on the mud-banks (locally termed "lick" or "leek" beds), near Topsham.

A male bird with a pure white ring round the neck was seen at Ilfracombe by Mr. Gatecombe (Zool. 1875, p. 4717).

In Dorsetshire, the Teal breeds commonly in suitable places, but neither in Cornwall nor in Somerset has it been known to do so. We think if we had more information this bird might be included among the birds nesting in Somersetshire, as there are so many suitable places for it to do so on the great turf-moors in the centre of the county, alas! almost a *terra incognita* to the ornithologist.

American Green-winged Teal. *Querquedula carolinensis* (Gmel.).

An accidental visitor of extremely rare occurrence. Mr. R. P. Nicholls, of Kingsbridge, obtained a full-dressed male specimen in the flesh, November 23rd, 1879, in the following manner:—A girl entered his shop with a basket covered by a cloth, and took out the bird in question and offered it for sale. As there was some disagreement as to the price the girl took it away with her, and as she did not return as anticipated, Mr. Nicholls went in search of her, and purchased the valuable specimen on her own terms. He had *at once* recognized the species, as he had stuffed many specimens in Chicago, U.S.A., and his brother, Mr. Henry Nicholls, coming in, and seeing the bird on the counter, immediately pointed out the white spot in front of the wings, and said he had never met with one like it before. It appears to have been shot from a flock on an arm of the Kingsbridge estuary by a local gunner. In December 1888, this specimen was exhibited at a meeting of the Zoological Society by Mr. Howard Saunders,

on behalf of Mr. Henry Nicholls, to whom it was given by his brother, and in whose possession it now remains (R. P. N. *in litt.*; H. N., Zool. 1880, p. 70; 'Field,' January 3rd, 1880; H. Saunders, 'Manual of B. Birds,' p. 421). Only two other specimens are known to have occurred in England, but this American Teal has been admitted into the British List both by Mr. H. Saunders (*op. cit.*) and the Committee of the British Ornithologists' Union.

Shoveller. *Spatula clypeata* (Linn.).

A winter visitor, occurring occasionally from September to April, but seldom in any numbers. It is usually met with in small flocks in the winter months, and in pairs in the spring, but Montagu describes a specimen which "was shot on a freshwater lake on the south coast of Devon, August 5th, 1807."

This singular and handsome Duck is a widely diffused species, being found throughout the northern hemisphere, and is a regular winter visitor to the north of Devon, and a season seldom passes without one or two being shot in the Barnstaple river; but it never occurs there in large flocks; two or three, at the most, being seen together, or single birds in company with Wigeon or Wild Duck. In our opinion, the Shoveller is one of the most palatable of all the wild-fowl, the flesh being remarkably sweet and tender. This, of course, applies to it only as long as it continues to feed on freshwater ponds; directly it betakes itself to the sea-coast, it becomes, like all other wild-fowl to be found there, rank and uneatable. We know of no instance of the Shoveller's nest having been obtained in Devonshire, but it has been detected breeding both in Somerset and Dorset. The late Mr. John Marshall, of Belmont, Taunton, received eggs of the Shoveller from North Curry Moor, a little to the east of his town, one of which he was good enough to present to us for our collection; and the same season several flapper Shovellers, which had been sent in from the neighbouring peat-moors, were exposed for sale on one of the stalls in Taunton market. At the time we resided at Weston-super-Mare we frequently visited the peat-moors between Highbridge and Glastonbury to shoot Snipe, and one winter's morning received a letter from a keeper on one of the fens we had permission to try, begging us to come at once, as a flock of "Spoonbills" had appeared. Considerably fluttered by this exciting news we managed to make an early start, and finding the moor a little wetter than usual, at last had six or seven Ducks pointed out to us, quite out of reach on the flooded ground, as the "Spoonbills," and then discovered that this was only the local name given to the Shoveller, and that our expectations of seeing *Platulea leucorodia* were not to be realized. Handsome drake Shovellers were frequently sent in by the peat-moor gunners to the game-dealer at Weston-super-Mare, and the bird seemed to be far from uncommon on the fen in the winter-time. One spring two pairs made their appearance on the lake at Sandhill Park, near Taunton, and we were in hopes they would have remained to breed, but after

staying for three weeks they disappeared. In Dorsetshire, the Shoveller appears to be less common, and its having nested at Ilstington ('Zoologist,' 1857, p. 5757) is considered by Mr. Mansel-Pleydell to have been an exceptional case. Mr. Rodd states that the Shoveller is not uncommon in Cornwall.

The singular beak of the Shoveller serves as a perfect colander, with which the bird skims and strains the surface-water, thus securing the animalcula &c. on which it feeds.

Dr. E. Moore records two specimens only. A pair occurred at Plymouth in 1853, and another in the spring of 1855. Examples from the Tamar are in Mr. Brooking Rowe's collection. Five occurred (three adult males and two females) in Plymouth Market, February 7th, and three more on February 14th, 1874; some in November 1877; several in December 1878; and five in November 1879 (J. G., Zool. 1874, pp. 3944, 3949; 1878, p. 54; 1879, p. 115; 1880, p. 48). One at Strode, in the parish of Modbury, S. Devon, in December 1879 (Rev. G. C. Green, Trans. Devon. Assoc. 1880, p. 93). Seven (two drakes and five ducks) frequented Torcross Ley in the winter of 1887-8 (E. A. S. E.). In January 1891, Mr. Walter Toll saw quite two hundred feeding together, and shot some, on Slapton Ley (R. P. N. *in litt.*).

There is a Shoveller from the Dart in the Torquay Museum. A young female was shot on the Exe in September 1841 (F. W. L. R., MS. Journ. iii. p. 107). A pair there April 1867. Five seen on the Exeter Canal in the winter of 1874-5. A nearly adult male was shot at Bramford Speke, December 13th, 1875, and two were killed on the Exeter Canal in the winter of 1875-6. A pair on the Taw, March 1870; and one on the north coast of Devon, November 1873 (M. A. M., Zool. 1870, p. 2144; 1873, p. 3825).

Red-crested Pochard. *Fuligula rufina* (Pallas).

An accidental visitor of extremely rare occurrence.

This beautiful species, an inhabitant of Southern and Eastern Europe, very rarely strays as far as our kingdom, and the examples of it have been chiefly obtained on the eastern coast of England. However, Mr. G. F. Mathew, happening to go into the bird-stuffer's shop at Barnstaple on the 21st December, 1867, saw lying on the counter a very fine adult drake Red-crested Pochard, which had been just sent in from Braunton, where it had been shot on the Burrows (G. F. M., Zool. 1868, p. 1098). This bird was purchased by Mr. Marsh-Dunn for his collection, and is the only instance of the occurrence of the species in Devonshire. There are three other West of England examples we may mention. Mr. Rodd records one which was shot on the Swanpool, at Falmouth, in February 1845, sold in the market for sixpence, plucked, and eaten! Fortunately, it had first been seen by Mr. W. P. Cocks, who recognized it and reported it. Then, Mr. Mansel-Pleydell states that a Red-crested Pochard, in the possession of Lord Portman, was shot on the Stour, at Bryanston, at the commencement of this century; and for the third West Country example we have to cross the Bristol Channel to the Pembrokeshire coast, where a female was shot by Mr. Tracy on Lord Cawdor's estate at Stackpole, which was subsequently presented by Lord Cawdor to the National Collection, and is still, we believe, to be seen at South Kensington. In

his handbook, Mr. Harting describes *two* Pembrokeshire examples, but we have reason to regard both his entries as referring to the same bird.

The Braunton example recorded above was seen by Mr. J. Gatcombe, who informed Mr. Dresser that the white portions of its plumage were tinged with a beautiful bluish colour. The Red-crested Pochard belongs to the freshwater Ducks, frequenting, and nesting on the edges of, inland lakes and ponds.

Tufted Duck. *Fuligula cristata* (Leach).

[Black Wigeon, Pied Wigeon: *Dev.*]

A winter visitor, arriving in October, and not uncommon in some seasons on our larger rivers, and especially numerous at Slapton and Torcross Leys. Mr. J. H. Gurney saw a Tufted Duck off Torcross on April 11th, 1865, and his late father saw another in the same place on May 22nd, 1871. This Duck, therefore, possibly breeds occasionally in the reed-beds of Slapton and other Leys on the S.W. coast, and it is also believed to have bred near Barnstaple.

At Plymouth, specimens were obtained in 1853-54-55, 1864, and 1870 (B. MS. Notes). Some occurred there on October 21st, 1873, December 1878, and November 1879 (J. G., Zool. 1873, p. 3787; 1879, p. 115; 1880, p. 48).

Montagu says "it 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'" (Orn. Diet. Suppl.). We saw some there in January 1856. An adult male occurred on Torcross Ley, February 6th, 1888, and some splendid full-plumaged males have been obtained by Mr. W. Toll and Mr. A. F. Holdsworth. Many were shot in January 1891 (E. A. S. E.).

Some occurred on the Dart, December 11th, and on the Teign, December 29th, 1870 (J. H. G., Zool. 1871, p. 2631). Two were seen at Dartmouth, November 9th, 1874 (G. F. M., Zool. 1875, p. 4326).

On the Exe, examples occurred in 1839, and on December 6th, 1844 (F. W. L. R., MS. Journ. ii. pp. 49, 156). Also in February 1855, November 1868, and October 1880.

The Tufted Duck has often occurred to ourselves on the Barnstaple river, where it is not rare, and a brood of very young birds made their appearance just below Barnstaple at the end of July 1859, which we considered might have been reared somewhere close at hand (M. A. M., Zool. 1859, p. 6761).

On February 18th, 1855, we had the pleasure of watching a fine male Tufted Duck swimming in an open space amongst the ice that at the time covered the Exe, about a mile above Topsham. We were concealed behind a wall not far off, and through a telescope were able to observe all the Duck's actions at leisure. It dived occasionally, remaining under water about one minute at a time by our watch. We saw it come up from a dive with a lively eel in its bill, and pass it through its mandibles from side to side for some time, probably to crush the bones, and beat it about in the water a great deal. At last it swallowed its captive, but the eel had not been long down the bird's throat before it wriggled up again, when the process of crushing and beating it was repeated, and it was then finally stowed away safely. Whilst watching this Duck, a female Red-

breasted Merganser settled in the same place close to it, and immediately began diving, but did not stay so long under water at a time as the Duck, although it seemed to have great success in fishing, as we saw it come up with a dab and several eels in about a quarter of an hour, when it flew away down the river. The Merganser appeared to use the same method of crippling its prey as the Duck, but did not take so long about it, and swallowed the fishes quicker; several of the eels managed to escape from its bill into the water, but were immediately recaptured; but on one occasion the bird had to dive again for the eel, which it did with astonishing rapidity. Both birds occasionally allowed an eel to float on the surface of the water for an instant, as if to change its position in their bill. After the Merganser had swallowed the dab, it did not seem to find its dinner sit comfortably, as it stretched its neck a good deal, and drank water, apparently to get rid of the slime in its bill. Both birds avoided getting too near to the ice, and always dived against the tide, which was running out strongly. There was a great difference in their manner of diving. The Duck sank gradually in the water, and partially submerged itself before plunging down. The Merganser, on the contrary, raised itself up before putting its head under water, as though to dive with greater force. The Merganser's bill being better adapted for holding its slippery quarry gave it the greater success of the two in fishing. The Duck remained much longer under water, but did not catch so many fish; it may, probably, have found other things to feed on at the bottom of the river. We once found many small shells in the stomach of a female Tufted Duck shot on the Exe.

Mr. Rodd had no knowledge of the Tufted Duck as a nesting-bird in Cornwall; but in Dorset it has certainly bred, on the excellent authority of Professor Newton. This was in the year 1876 (Mansel-Pleydell, 'Birds of Dorset,' p. 158). In the winter months the shallow and muddy waters of the bay at Weston-super-Mare, in North Somerset, are visited by great flocks of diving Ducks; among them we frequently saw Tufted Ducks. We have also noticed pairs of Tufted Ducks in the spring on ornamental waters many miles inland; as, for instance, upon the lake in Orchardleigh Park, near Frome, which must be more than thirty miles from the nearest coast.

Although occasionally nesting in this kingdom, the Tufted Duck goes far north, in company with most of the other wild-fowl, for its summer-quarters.

Scaup. *Fuligula marila* (Linn.).

[Blue-bill (on the Exe).]

A winter visitor, generally arriving in October. One, however, was shot on the Exe on 11th August, 1876. After heavy gales in autumn small flocks come up the estuaries of some of the rivers on the South Coast, and being then very tame, or stupid, these Ducks are easily shot. Mr. Gatcombe found that adults were rare at Plymouth, and he states

that he never met with more than two or three in the market there, but immature birds were often obtained in winter. Mr. R. P. Nicholls says it is not common in the Kingsbridge district, and old males are rare. The Scaup occurs sometimes on Slapton Ley in winter; there were many there, and on the Kingsbridge estuary, in January 1891 (E. A. S. E.). It has frequently been obtained on the Exe estuary, where it was numerous in February 1855, and some fine adults were shot there during the severe cold of January 1891. There is a variety of the female in the A. M. M., shot on the Exe in 1847, which has a white collar round the neck.

The Scaup is one of the most numerous of the wild-fowl which visit the West Country in the autumn, but being of little account for the table, and, as a rule, keeping in large flocks some miles off the coast, not much exception is done among its numbers by the shore-gunners, who, knowing that it possesses little value, do not trouble themselves much to molest it. After very rough and severe weather the Scaups sometimes are seen in the mouths of our tidal rivers. On the Barnstaple river, at Instow, we have met with them, and have there found them to be difficult of approach, as they swam away from the boat faster than it could follow. Great flocks of Scaups are to be found in the bay at Weston-super-Mare throughout the winter, incessantly diving for their food, together with Common Scoters, Pochards, Tufted Ducks, and a few Golden-eyed Ducks. We have sometimes encountered small parties of Scaups feeding in the water at the edge of the advancing tide, and by walking quietly along, and taking no notice of them until we have got well abreast of them, have then, by suddenly running down, obtained a good shot into the birds, getting near enough in that second of uncertainty in which they did not know whether to swim away or to rise on wing. Or, going out on the bay in a boat when the water has been shrouded by a dense fog, we have dropped down quietly into the midst of the flocks, and have had them at our mercy, and have had the birds fly close across our bows, or low overhead, offering easy shots. But there seemed to be little sport in shooting such useless birds, and we were not often tempted to fire at them. Curiously enough, and it is an instance of the capricious and unequal distribution of wild-fowl along our coasts, the Scaup is reported as a rare bird in the Dorsetshire waters; there may be something in the warm and muddy shallows of the Severn Sea which suits its tastes; in old days, when we very frequently made the uncomfortable passage across to South Wales by the ferry to Portskewet, we invariably saw flocks of Scaups as high up the channel as this in the winter-time. Nor does Mr. Rodd note it as a common bird in Cornwall, for the reason which he suggests, its keeping generally far out to sea and seldom approaching the bays and estuaries. The Scaup retires to the northern parts of the world for the nesting-season, and Mr. Dresser states that there is no instance of its having reared a brood anywhere in the United Kingdom. However, Mr. Cecil Smith quotes a communication to the 'Zoologist' for 1867, p. 878, from Mr. J. H. Harvie-Brown, who mentions Mr. Selby as an authority for a female Scaup having been seen, attended by a young one, on a small loch in Sutherlandshire by Sir William Jardine in 1834.

The Rev. Charles Swainson, in his 'Provincial Names of British Birds,' states that the Scaup gets its name "from its feeding among broken oyster and mussel shells, called in the north 'scaup.'"

Pochard. *Fuligula ferina* (Linn.).

[Frosty-back (male, on the Exe), Dun Curre, Cur Wigeon (female and young).]

A winter visitor, occurring in rather small numbers, seldom ascending the estuaries; most frequently met with at Slapton Ley, where it is said to be common in severe winters, and also at Plymouth. Very few now occur on the Exe, and it is rare at the present day on the Kingsbridge estuary.

Although well known, the Pochard is far from common in North Devon. We have occasionally seen it on the Barnstaple river, and have known examples brought into Barnstaple which had been shot on the Braunton Marshes; but it is, certainly, one of our rarer Devonshire fowl. It is frequently met with on the South Cornish coast, according to Mr. Rodd, and is considered an excellent bird for the table. On the Dorset coast Mr. Mansel-Pleydell considered the Pochard the commonest of all the Wild Ducks, and of late years it has become a regular nesting species in his county, a result due to the beneficial effects of the Bird Preservation Acts. In Somerset this diving Duck is also fairly common, to be met with during the winter on inland ponds, as well as upon the shallows on the northern coast. We have frequently seen it on the bay at Weston-super-Mare, diving in the shallow muddy water, in company with Scaups and other fowl.

The Pochard does not go so far to the North for the breeding-season as some of our other Ducks, being mainly confined to the North Central portions of Europe.

Its name seems to be connected with the colour of its head, perhaps fancifully supposed to have some resemblance to a red-hot poker. In some districts the bird is known as the "Poker"; and in the North of Ireland it goes by the names of the "Bull-headed" and "Great-headed Wigeon," from the trick the bird has of puffing out the feathers on the head while it is swimming on the water, making the head appear of unnatural size. Mr. Cecil Smith states that the gamekeepers he was acquainted with in his county persisted in calling this bird "the Wigeon."

Specimens occurred at Plymouth in 1853, -54, -55, and -62 (B., MS. Notes); 1875, -78, -79, -81 (J. G.). An adult female was shot there August 7th, 1885, with the tail and wing-feathers much worn and faded in colour (J. G., Zool. 1885, p. 378). A male was obtained on Torbay, December 28th, 1839 (A. von H., Zool. 1870, p. 2059). One in Kingsbridge estuary, December 1890 (E. A. S. E.). Mr. Elliot shot two males on Slapton Ley, January 1891, and wounded birds have been known to remain there all the summer (R. P. N.). On the Exe estuary a few were obtained in January and February 1855, and one January 17th, 1856. The last we have seen were a male on December 27th, 1878, and a male and female exposed for sale in Exeter on 19th and 26th December, 1879.

White-eyed Duck. *Nyroca ferruginea* (Gm.).

[Ferruginous Duck.]

An accidental visitor, of extremely rare occurrence.

Dr. Moore records a specimen "at Drew's" (Mag. Nat. Hist. 1837, p. 360). Bellamy says "only one specimen" (Nat. Hist. S. Devon, p. 218); and Mr. J. B. Rowe mentions that "only one or two specimens have occurred" (Trans. Plym. Inst. 1862-63, p. 78). Mr. Gatecombe only knew of the occurrence of one immature bird, probably the one at Drew's.

A female of this species was shot on Slapton Ley about the middle of November 1874. It was recognized amongst a number of wild-fowl which had been killed on the Ley on a Public Shooting Day there. Mr. W. Jesse sent this bird to Mr. R. P. Nicholls, and the skin was submitted for inspection to Messrs. Sharpe and Dresser, and was exhibited before the Zoological Society. Mr. R. P. Nicholls does not know what became of it afterwards (R. P. N., *in litt.* and MS. Notes).

This pretty little species of freshwater Duck is a summer migrant to the South and Central parts of Europe only, and it is a rare occasional visitor to our Eastern Counties in the spring months, while its appearance anywhere in the West Country can only be regarded as accidental, and it is singular that the only two instances of its occurrence should have been in the *winter*—the one in the south of Devon having been shot at the beginning of November, while a fine example, recorded by Mr. Mansel-Pleydell, was obtained at the mouth of the Wareham river, in Dorset, on 3rd January, 1879. These winter occurrences of a Duck which is, in general, only a summer migrant from the far South may be compared with the appearances of the Red-footed Falcon, also a summer migrant from the South, in the West of England in the winter months, and are not a little puzzling. There are no instances of the White-eyed Duck reported either from Cornwall or Somerset. Our own specimens were sent us in the flesh, through the kindness of Mr. J. H. Gurney, from Leadenhall Market, where this Duck is occasionally to be seen in the spring hanging up with other fowl which have been received from the Continent.

The prevailing tints of the plumage of this small species are a bright rusty red on the head, throat, and breast, with a brown back and white underparts; and it gets its name from the white iris of the eye.

Golden-eye. *Clangula glaucion* (Linn.).

[Diving Wigeon, Cur Wigeon (female).]

A winter visitor, but not very numerous; small flocks and single birds occurring occasionally, especially in severe seasons, on our estuaries and at Slapton Ley. A small flock generally appears on Kingsbridge estuary early in October, consisting of females and young birds (E. A. S. E., MS. Notes). This Duck appears to have been much more abundant formerly.

"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" (Montagu, Orn. Dict., Suppl.). "Formerly the Golden-eye came [to the Exe estuary] in considerable flocks every winter, but now they are visible in comparatively small numbers" (W. R. S., Zool. 1845, p. 982). We have, however, seen a good many on the Exe from time to time.

The Golden-eye is another very expert diver, and is not uncommon as a winter visitor to North Devon, where it has occurred to ourselves, on small ponds and marshes adjoining the Barnstaple river, both in its full adult and in its immature dress. In the former of these stages it is, however, more rarely obtained than in the latter; young birds and females greatly outnumbering the adult males, which do not appear until the winter is well advanced. And this appears to be the case with this species all round our coast, according to the information which we glean from other writers.

Specimens were obtained on the Exe in January and February 1838, and November 1842 (F. W. L. R.); in 1847 and 1849 (R. C.); February and December 1853, November 1854, January, March, and November 1855, December 1879, 1882, and January 1891 (several adult males). An adult male on the Teign, February 15th, 1870 (Zool. 1870, p. 2078). A female on Torbay, December 28th, 1869 (Zool. 1870, p. 2059). Golden-eyes were very numerous on Kingsbridge estuary in the winter of 1874, and some were met with in 1875, '76, and '77 (E. A. S. E.). An adult male January 1885, near Slapton (R. P. N., Zool. 1885, p. 68). A flock of about thirty on Kingsbridge estuary, October 14th, 1886. Three adult males were shot on the estuary at Kingsbridge, January 1889. Some females on Slapton Ley in January 1891 (E. A. S. E., MS. Notes).

At Plymouth it occurred in 1855 (three) and in 1870 (B., MS. Notes); some November 1875, January 1878, 1879, January 1881, December 1882 (J. G., Zool. 1876, p. 4784; 1877, p. 132; 1879, p. 48; 1881, p. 195; 1883, p. 166).

Several were obtained on the Taw in 1878 (Zool. 1879, p. 129).

We have occasionally seen the Golden-eye on the bay at Weston-super-Mare, but Mr. Cecil Smith did not consider it a common species in Somerset. Although there are one or two instances reported of this species having nested in the North of Scotland, it is one of those Ducks which go very far north for their nesting-stations. The favourite position for the nest is in the hollow of a tree, and the peasants in Sweden and Finland suspend wooden boxes, which the birds readily take to and nest in.

[*Observation.*—In Greenland and Iceland there is another species of Golden-eye—Barrow's Golden-eye (*Clangula islandica*), a somewhat larger and stouter bird, differing also considerably in its plumage from the Common Golden-eye, having a greater development of crest and a more purple gloss on the head. As almost every bird to be found in the Northern Palaæctic Region may be expected to occur at some time or other in the United Kingdom, it is quite probable this species may have been obtained, and may have been confounded with our common bird; and there is a reported instance of a female from Yorkshire (Zool. 1864, p. 9038), which failed, however, to establish its authenticity (Yarrell, 2nd ed. iv. p. 436), as it proved to have been received from Iceland (Zool. 1864, p. 9122).]

[**Buffel-headed Duck.** *Clangula albeola* (Linn.).

The occurrence of this bird in Devon is doubtful. "One, West Mud, near Devonport, winter of 1841, in the collection of Rev. W. Hore, of Barnstaple" (Harting, 'Handbook of B. Birds,' p. 161). According to Mr. Gatecombe this specimen "came from the late Mr. Tripe, of Devonport, whose collection contained several American birds, and a mistake is therefore not impossible" (H. Saunders, Yarrell's B. Birds, 4th ed. iv. p. 443). Mr. Saunders omits any mention of this specimen in his 'Manual of B. Birds,' but retains the species in the British List. We have often seen the Rev. W. S. Hore's example which he told us he had purchased from the collection of Mr. Tripe, of Devonport, who, for many years, was the only person who collected birds in that town. It is a male in full plumage, and is said to have been shot on the West Mud, Hamoaze, in the winter of 1841. Mr. Tripe considered it to be only an example of the Golden-eye, and had no idea of its real value (Rev. W. S. Hore, *in litt.*).

This is a very common North-American species, like the Golden-eye, also nesting in holes of trees, whose appearance in this country is not unlikely, considering how many North-American birds contrive to reach us by an overland route to the extreme north.

The Buffel-headed Duck is a plump little bird, known to the American shore-shooters as the "Butter-Ball," because it is almost invariably in excellent condition. The drake, in its full plumage, is an extremely handsome bird, having a crest or hood of elongated feathers of a dark greenish glossy black, the crown, the lores, and the chin rich purple, while extending behind the eye to the nape is a broad patch of pure white, giving the bird, when the crest is erected, the appearance of being adorned with a tricolour cockade; the back is deep velvety black, and the underparts are white. We give this description from a very beautiful North-American specimen in our own collection. We have shot this Duck on the Detroit River, near Port Sarnia, in Ontario, and nothing could exceed the beauty of the adult drakes as they sat on the water. They were rather difficult to kill, as they dived with great rapidity, and well deserved the name of "Spirit Ducks" sometimes applied to them. We have also met with it on the Pacific coast in California in winter.]

[**Harlequin Duck.** *Cosmonetta histrionica* (Linn.).

Of very doubtful occurrence. Dr. Moore records a female which was shot on the Hamoaze, in the winter of 1830 (Trans. Plym. Inst. 1830, and Mag. Nat. Hist. 1837, p. 360). The two specimens mentioned by Dr. Battersby (Zool. 1847, p. 1697) as having been killed on Torbay, proved to be young Long-tailed Ducks (A. Newton, Ibis, 1859, p. 165). This beautiful bird, which has received its name from its parti-coloured plumage of blue, black, white, and red, strongly contrasted, is most common in North America, but is also found in the northern parts of Europe and Asia.]

Long-tailed Duck. *Harelda glacialis* (Linn.).

A winter visitor, of occasional occurrence in the autumn and winter months, chiefly on the south coast of the county. Montagu, however, met with only one specimen, a female, on the South Coast of England, and Dr. E. Moore does not seem to have seen any at all in Devon. In his day the bird was, very likely, undetected as an occasional straggler in winter.

The Long-tailed Duck is a species frequenting high latitudes, which comes south in the autumn, and, although well known as a saltwater Duck during the winter months off the coasts of Scotland, only in severe winters strays as far southwards as to be met with on the shores of the S.W. of England. Still, a sufficient number of examples have occurred in South Devon, on the bays and estuaries, in all stages of plumage, to remove it from the list of our rarest wild-fowl. In North Devon it is not so often met with, and we know of only three examples having been procured on the Taw, all young birds in immature plumage, obtained in hard weather; one of them is in our collection.

The drakes of this species, with their long tails, and their pied plumage of chestnut and white, are extremely handsome birds. This Duck goes by many names in the North, being called the Calloo Duck, the Ice Duck, the Northern Hareld, &c. The first of the three names we have mentioned is taken from the very musical note of the bird; "the united cry of a large flock sounds very like bagpipes at a distance," we are told. Flocks of Long-tailed Ducks are said to be very playful, the birds chasing one another, and indulging in various gambols, especially in rough and boisterous weather. During a tremendous storm off the Isle of Iona, a correspondent of Mr. Gray's informed him that in the midst of the intense gloom occasioned by the mist and driving sleet, "there arose a triumphant song of these wild creatures above the uproar of the elements; and, when the mist lifted, I beheld the whole flock carcering about the bay as if mad with delight" (Gray, 'Birds of the W. of Scotland,' p. 390).

Bellamy says that "several specimens have been captured on the Tamar" (Nat. Hist. S. Devon, p. 217). An immature bird was bought in the Devonport Market by Mr. J. Gatcombe, November 19th, 1851.

Many have occurred at different times on the Kingsbridge estuary. A male, in almost full plumage, together with a female, were obtained there, October 28th, 1865; a female, October 14th, 1875; and another female in 1876 (R. P. N., Zool. 1875, p. 4697; H. N., Zool. 1866, p. 526; 1876, p. 5180). Several immature birds were shot there in November 1889, and five in December 1890, when it was quite numerous (E. A. S. E., MS. Notes). The Long-tailed Duck has also occurred at Slapton Ley (R. P. N.). A flock, recorded as Harlequin Ducks, was seen in the winter of 1846-47 on Torbay (Dr. Battersby, Zool. 1847, p. 1697). A young male was shot on Torbay, December 20th, 1869 (Zool. 1870, p. 2059), and an immature bird, November 24th, 1873 (Trans. Devon. Assoc. viii. p. 294).

Mr. Ross records a young male on the Exe in December 1841 (MS. Journ. iii. p. 35), and there is a fine adult male in *summer* plumage killed on the Exe in 1847, and another adult in winter plumage, from that river, in his collection now preserved in the A. M. M. A young male occurred on the Exe in October 1851 (F. W. L. R.); and another was seen on the Exe, by Mr. Rudd, in March 1852 (W. T., 'Naturalist,

1852, p. 203). A bird of the year was shot out of a small flock between Exmouth and Starcross, November 18th, 1867 (C. S., Zool. 1868, p. 1059). A young male on the Exe, December 1876 (Zool. 1877, p. 105); two immature birds were shot by Mr. Dumbleton, of Exmouth, January 1st, 1879, and another was killed in December 1890. One occurred at Barnstaple, November 1858 (Zool. 1859, p. 6448).

In Cornwall Mr. E. H. Rodd considered the Long-tailed Duck very rare, but is able to mention several instances of its occurrence, one of them having been shot some distance inland. On the Dorset coast Mr. Mansel-Pleydell regarded it as to be generally expected in severe winters, and speaks of two which were shot at Poole as late as the month of May, and mentions five, one of them an adult drake, which were shot in the harbour there in November 1887 (Zool. 1888, p. 31). Mr. Cecil Smith was not able to include this species among the birds of his county, and the only Somerset example we know of is an immature bird, which was shot at Weston-super-Mare, December 16, 1890 (Zool. 1891, p. 66). The Long-tailed Duck has, apparently, occurred more frequently on the South Devon coast than anywhere else on the sea-board of the S.W. peninsula.

Eider Duck. *Somateria mollissima* (Linn.).

A casual visitor, of rare occurrence during the winter months. Montagu records a female shot on the coast of South Devon in the winter of 1807 (Orn. Dict.). Dr. E. Moore mentions another female obtained near Plymouth in January 1830 (Trans. Plym. Inst. 1830, p. 340). During the frost in December 1844 three immature birds were shot on the Exe estuary (W. R. S., Zool. 1845, p. 982). A fine young male was killed in Plymouth Sound early in January 1868 by Mr. G. Moreom. There were two birds in company, but the second (probably a female), on the fall of her companion, made a few circuits in the air and then flew off seawards. Mr. J. Gateombe, who made a drawing of this specimen, informed us that he had seen one or two other examples of this species that had been killed in Devonshire (*in litt.* 26th April, 1883). A female was shot on Torbay in the winter of 1866 (Von H., Zool. 1874, p. 3908), and is preserved in the Torquay Museum. One is said to have been killed at Exmouth in January 1871 (J. C. W., *in litt.* January 18th, 1871); and an immature male on Torbay in the winter of 1875. We received a fine young male from Barnstaple in December 1891, which had been shot on the Taw, the only instance we know of this Duck's occurrence in North Devon.

Although the Eider Duck nests every year on the Farne Islands, off the Northumberland coast, as well as on several of the islands off the coast of Scotland, it very seldom comes south, and is a far scarcer visitant to our West Country shores than the preceding species. In Cornwall Mr. Rodd could only mention one; while off the Dorset coast a few are stated by Mr. Mansel-Pleydell to have been met with, a flock of nine having been seen on the Fleet, near Poole, November 27th, 1871, out of which four were shot. The few recorded Devonshire examples have

mostly been obtained in the south of the county. The only Somerset Eider we know of is a female which was shot on the reservoir of the waterworks at Barrow, near Bristol, in November 1888 (Zool. 1889, p. 32).

The Eider is a very common and well-known bird in the far north, and in many places nests quite tamely close to human habitations, readily making use of boxes provided for its convenience. The well-known and valuable eider-down is plucked from the breast of the female bird by herself in order to line her nest, and to cover her eggs and keep them warm while she is away on the water obtaining food. Like all the drakes belonging to the extensive genera of *Anas* and *Fuligula*, the male Eiders also undergo a curious summer moult, in which they pass from their brilliant spring plumage into a dark sombre dress, somewhat resembling that of the female bird.

[King Eider. *Somateria spectabilis* (Linn.).

An accidental visitor, of extremely rare occurrence. One, said to have been killed near Plymouth, was seen by Mr. Gatcombe in the flesh at a bird-stuffer's named Mutton (J. H. G., Zool. 1876, p. 4803). Mr. Howard Saunders says that Mr. Gatcombe states that some years ago he saw an immature bird in Plymouth Market (Yarrell's B. Birds, 4th ed. iv. p. 464). Possibly these two records relate to the same bird, which might have been brought from Newfoundland or Labrador in a frozen condition in one of the numerous vessels bringing salt-fish to our ports. One year, to our knowledge, several fine adult males were brought to Exeter in the flesh in that manner, were purchased by Messrs. Ross, W. Tombs, and Dr. W. R. Scott, and were preserved in their collections, now in the A. M. M. This very beautiful bird is more of an Arctic species than the Common Eider, its home being to the extreme north of the Old and New Worlds, and it very seldom indeed comes so far to the south as to be a rare straggler even to the northern coasts of Scotland. The adult male differs considerably from the adult male of the Common Eider both in plumage and in the shape of the bill, which in the King Eider possesses a curious frontal knob. As the supposed Plymouth specimen is the only one which has ever been recorded from the S.W. of England, we are disposed to look upon it with the greatest suspicion.]

[*Observation.*—There is yet another Eider on the British List, two instances of its occurrence being recorded on the Eastern coasts of the Kingdom, one at Yarmouth and the other at Filey, in Yorkshire. This is, perhaps, the most handsome representative of this beautiful family, and goes by the name of Steller's Eider or Steller's Western Duck. Its home is in the extreme north of Europe and Asia. The adult Drake is a singularly beautiful bird, its plumage consisting of various brightly contrasted colours—white, green, and blue on the upper parts of the body, and deep ferruginous red on the underparts. Its appearance on the S.W. coasts is hardly to be expected.]

Common Scoter. *Edemia nigra* (Linn.).

[Black Duck.]

A winter visitor, arriving in August or September, and remaining till late in the spring. Dr. E. Moore suspected that this species bred in Devon (J. B. R., Trans. Plym. Inst. 1862-63). A few non-breeding birds occasionally remain on the coast during the summer. Mr. Ross had a male shot on the Exe in July 1844, but it is very unusual for this bird to enter that estuary. Mr. Bolitho at Plymouth received two males in May and June 1853. Mr. Cecil Smith saw a male off Exmouth, May 19th, 1868. On June 2nd, 1877, we saw flocks off Langstone Point, near Dawlish. Large flocks are sometimes seen off the South Coast in autumn and winter, but they usually keep well out at sea. The Common Scoter generally visits Plymouth Sound in October, especially if the wind is easterly. One was seen in Stonehouse Pool on September 12th, 1876, and large flocks in Start Bay, at the end of September 1883 (J. G., Zool. 1880, p. 47; 1876, p. 5145; 1884, p. 53).

A fine old male was killed near Plymouth, March 22nd, 1873. Many flocks appeared on the Tamar, after severe frost, October 29th, 1873. Thirty were seen on Plymouth Sound, January 28th, 1875; and an adult male, February 1st, 1881, and another later (J. G., Zool. 1873, p. 3563; 1874, p. 3906; 1875, p. 4273; 1881, p. 197).

Some occur occasionally on Kingsbridge estuary (R. P. N., MS. Notes). Mr. E. Elliot killed three females there at the end of 1889, and one in March 1891.

Numerous flocks were seen on Torbay in October 1844 (Ross, MS, Journ. iv. p. 148); two were shot there, February 17th, 1869, and two adult males, January 12th, 1870, and common Scoters were abundant and in large flocks again in February 1874 (A. von H., Zool. 1869, p. 1720; 1870, p. 2059; 1874, p. 3906). Large numbers were seen off Brixham, February 1891.

Flocks are frequently seen off Exmouth. A great many were observed there in April 1869 (C. S., *in litt.*). One at Dawlish, October 14th, 1874. Flocks off Langstone Point, 2nd June, 1877. In August 1890 and 1891 we saw large flocks flying towards Torbay from the S.E. (W. D'U.).

This bird is an occasional visitor to Lundy Island (Trans. Devon. Assoc. viii. p. 309), but is not numerous on the north coast of the county.

Baron A. von Hügel observed that in Torbay it fed on *Solen ensis* and *S. vagina* (Zool. 1870, p. 2059).

Except at the nesting-season the Scoters are all salt-water Ducks, very rarely entering our estuaries. Large flocks of the Common Scoter make their appearance in the English Channel early in the autumn, and many are to be met with throughout the winter off the South Devon coast at Exmouth, Torbay, Plymouth, &c. Flocks also ascend the Bristol Channel, where we have seen them on the bay at Weston-super-Mare diving in company with the Scaups and other fowl. Flocks of Common Scoters are also seen off the Cornish and Dorset coasts, keeping some distance out, unless very rough weather drives them to seek the shelter of the shore. Mr. Rodd states that examples are occasionally found entangled in the fishermen's nets. After severe storms a stray Scoter is sometimes picked up a considerable distance inland. We had in our possession a fine adult which was shot at New Bridge, on the Taw, some nine or ten

miles from the mouth of that river. Specimens of the Common Scoter have also been obtained occasionally between Barnstaple and Instow.

The Common Scoter nests in the extreme north of Scotland in small numbers, but the summer station of the species is more generally sought in the North of Europe, in the northern parts of Norway, Finland, &c. We consider that it is extremely improbable that it has ever nested in South Devon.

Velvet Scoter. *Edemia fusca* (Linn.).

[Velvet Duck.]

A casual winter visitor, of rare occurrence.

Being exclusively a sea Duck the Velvet Scoter seldom approaches the coast. Polwhele, in his 'History of Devon,' states that the "Great Black Duck," as he called it, had been found in Devon, and Dr. E. Moore mentions a female which was in Mr. Drew's collection (Mag. Nat. Hist. 1837, p. 360). An adult male and two females were shot on Torbay at the beginning of November 1869, and some were seen there in January 1870 (A. von H., Zool. 1870, pp. 1983, 2059). Perhaps the two females in the collection of the late Mr. Cecil Smith from Torbay were obtained at that time. An immature specimen in the Torquay Museum was killed on Torbay, and one in the A. M. M. was probably killed there also. One was shot in Plymouth Sound in January 1879 (J. G., Zool. 1879, p. 206). A female shot at the mouth of the Kingsbridge estuary is in Mr. Henry Nicholls's collection. One was shot in the estuary of the Exe, near Lypstone (W. Taylor, Zool. 1883, p. 426).

To be easily distinguished from the Common Scoter in all stages of its plumage by the white bar on the wings, the Velvet Scoter is a much rarer species, apparently limiting itself in the autumn and winter chiefly to the north-eastern shores of the kingdom. Many years ago we saw a vast flock of Velvet Ducks off Deal, pretty close inshore, in rough weather, at the end of December*, and there can be little doubt that flocks appear annually in the English Channel, in general keeping a considerable distance from the shore. In North Devon it is extremely rare. The bird-stuffer at Barnstaple informs us that he has had an occasional example of the Velvet Scoter sent to him, and Mr. Cecil Smith saw one in his shop which had been shot in Barnstaple Bay in the year 1882 (Zool. 1885, p. 4); but we ourselves have never seen an example from North Devon, nor can we remember one ever having been obtained on the North Somerset coast among the wild-fowl at Weston-super-Mare. The only Somerset example we ever heard of is one said to be in the museum at Salisbury, a female, labelled "Somerset" (Dresser, 'Birds of Europe,' vi. p. 658). Like the Common Scoter, this species arrives very early from the north, as

* We were very anxious to go out and shoot a few, but there was at that time a great fleet of weather-bound ships in the Downs, and the boatmen, having plenty to do, asked a prohibitive price when we tried to engage a boat for the purpose.

Col. Hawker states that he shot three out of a flock one day in the month of August, in Poole Harbour, where, at the present day, it is not very rare, being, according to Mr. Mansel-Pleydell, in proportion of one to every twenty of the Common Scoter.

From information supplied by the late Mr. Booth to Mr. Dresser it seems probable that the Velvet Duck, as well as the Common Scoter, nests occasionally in the North of Scotland. It is common throughout Scandinavia and Lapland, north of 60°, during the breeding-season.

Surf-Scoter. *Edemia perspicillata* (Linn.).

An accidental visitor, of very rare occurrence on the south coast of the county.

The Surf-Scoter is a very common and well-known bird in North America, both on the Pacific and Atlantic coasts, called by the shore-shooters by the not very elegant name of "Skunk-billed Coot," *Coot* being their generic term for every species of Duck. The adults are readily to be distinguished from the other Scoters by the two white patches, one on the forehead and the other on the nape; and in the Surf-Scoter there is no white alar patch as in the Velvet Scoter. The three Scoters also differ considerably in the colours of their bills, which are remarkably parti-coloured with red, orange, and blue-black. The Surf-Scoter has now occurred three times on the south coast of Devon, particulars of which we give below; all were immature birds. Mr. Rodd mentions two obtained on the Scilly Islands, one of these, picked up on the beach in a dying state, was examined by him in the flesh, and was a beautiful adult male; the other was immature. One, recorded by Dr. Bullmore, was picked up near Pendennis Castle, on the beach, in a mutilated state. Two have been recorded from the Dorsetshire coast, both from Weymouth. Like the other Scoters, this American species is an excellent diver. It goes very far to the north in the nesting-season, and is then quite a circumpolar bird.

An immature specimen shot on Torbay in 1860 was purchased by the late Mr. J. C. Hele, of Newton Abbot, from Mr. E. Burt, curator of the Torquay Museum, and was sold in one of the lots at the dispersion of Mr. Hele's collection. Mr. Henry Nicholls mounted a Surf-Scoter in, or about, 1862, which had been shot by Mr. Anning on Slapton Ley; and Mr. Edmund A. S. Elliot had the good fortune to obtain an immature male which was shot near Kingsbridge by Mr. Tom Foale on 20th October, 1891. It was very thin, the stomach containing grass-wrack (*Zostera marina*) and some small shells determined to belong to British species (E. A. S. E., *in litt.*).

THE MERGANSERS.

The Mergansers form a well-defined family of diving Ducks, with rather flat and compressed bodies adapted to offer the least resistance to the water, all of them adorned with crests, and possessing serrated mandibles, which enable them to hold the captured fish on which they almost exclusively live. Two of them, the Goosander and the Red-breasted Merganser, nest within the limits of the United Kingdom; the pretty black and white Smew comes to us as a winter visitor from the North, and none of them are seen off the Devonshire coast until the season of the autumn migration arrives. One other species, the Hooded Merganser, which has its home in North America, a very handsome bird, with a conspicuous cockade-shaped crest, has once or twice been obtained on the British coast, but there is no authenticated instance of its appearance in the S.W. peninsula.

Goosander. *Mergus merganser*, Linn.

A winter visitor, of occasional occurrence, either singly or in small flocks, on the bays, leys, and estuaries of the south coast, but it is far from common in the north of the county. The specimens met with are generally in immature plumage, or else females; adult males in full plumage are rare. The beautiful buff-colour of the breast-feathers soon disappears after death. When recently killed this bird is one of the most brilliantly coloured of all our wild-fowl.

This very handsome diver is rare on the northern coasts of Devon, although it is a frequent winter visitor to the bays and estuaries in the south of the county, and is, in some seasons, quite common. We only know of two drakes, in full plumage, having been secured in the neighbourhood of Barnstaple; immature birds and females are of more frequent occurrence, and we have ourselves seen them on the Barnstaple river. Mr. Rodd mentions that adults, in perfect plumage, are also rarely obtained in Cornwall. Off the Dorsetshire coast the Goosander is not an uncommon winter visitor. On the North Somerset coast Goosanders are frequently obtained in severe winters. In one hard frost three or four splendid males were brought to the Weston-super-Mare bird-stuffer in the

course of a single week, all having been shot on the frozen "rhines" which intersect the adjoining levels. Goosanders are sometimes met with on freshwater ponds some distance inland, occasionally presenting themselves in curious places, and one of the two adults obtained at Barnstaple suffered itself to be caught by the hand. It was in a narrow stream, and when it was approached attempted to conceal itself in a scanty patch of rushes by the bank, where its beautiful plumage led to its easy detection.

A few Goosanders nest in Scotland; and in the nesting-season the bird is widely distributed throughout the whole of the northern parts of the world, coming south in the autumn with the other migratory fowl.

An adult male occurred on the Tamar on February 5th, and another on February 9th, 1830 (T. J. Bray's 'Tamar and Tavy,' p. 355, with figure of trachea). One on the Exe, January 8th, 1838 (F. W. L. R., MS. Journ. i. p. 57). One near Exeter about 1840 (R. C.). One at Countess Weir, on the Exe, December 10th, 1879; this bird we purchased in the flesh from the man who shot it (Zool. 1880, p. 68). These last two specimens are now in the A. M. M.

Some in the severe weather of February 1855 occurred at Plymouth, and there was an adult female in Plymouth Market, January 6th, 1875. Several in immature plumage were noted there, December 19th, 1875 (J. G., Zool. 1855, p. 4705; 1875, p. 4372; 1876, p. 4785). Some at Slapton Ley in January 1856; and some young males there, December 3rd and 23rd, 1875; and a female was shot on December 7th, 1875, out of a flock of seven on the Avon, and three males were seen soon after (R. P. N., Zool. 1876, p. 4803). A female was shot on the Avon, January 15th, 1889 (E. A. S. E.). Mr. R. P. Nicholls has never had a full-plumaged male from the Kingsbridge estuary. An adult female was shot on Torbay, January 11th, 1870 (A. von H., Zool. 1870, p. 2059). On the Exe a young male was shot on February 10th, 1855, and others were seen during the severe weather of that month. A young male was shot at Brampford Speke, near Exeter, February 9th, 1881, which is now in the A. M. M., with several other immature birds, killed on the Exe at various dates. Several were killed in December 1890 and January 1891. One occurred on the Taw, in February 1870 (J. G., Zool. 1870, p. 2069).

Red-breasted Merganser. *Mergus serrator*, Linn.

[Spike-billed Wigeon (on the Taw), Saw-bill (on the Exe).]

A winter visitor, of rather frequent occurrence on the coast and in the estuaries of our larger rivers, appearing sometimes in October, and has been seen by us as late as the end of May in North Devon. Immature birds are most frequently met with, but adults are occasionally obtained, especially in early spring, when they are usually in pairs. Montagu considered it a rare species in the South of England (Orn. Dict., Suppl.), and Mr. J. Gatlcombe says it is very seldom met with in the West of England (Zool. 1881, p. 198). Mr. Bolitho had only three sent to him to preserve in twenty years. We have, however, seen and handled more examples of this species than of the Goosander, and do not consider it an uncommon, but an irregular visitor, and both Mr. R. P. Nicholls and Mr. E. A. S. Elliot find it more frequent on the Kingsbridge estuary than the Goosander.

On February 3rd, 1855, we took fourteen small flounders, of the size

of a half-crown piece, from the gullet of a female specimen shot on the Exe near Topsham. The little fishes lay in the bird's gullet, one on the top of the other, closely packed up in a neat *rouleau*, like coins in a silk purse.

As this beautiful species nests not uncommonly on some of the Scottish lochs, and also on some of the loughs in the North of Ireland, it might be well expected to be a not uncommon winter visitor to our S.W. coasts. On the Barnstaple and Bideford rivers it is well known to the boatmen as the Spike-billed Wigeon, and young birds and females are frequently obtained. We have ourselves met with them when after Wild Duck, and have also once or twice noticed adult drakes in their complete plumage, when they are strikingly beautiful birds. But in this stage they are remarkably wary, keeping always in the centre of the estuary, on some sandbank, whence they can watch the approach of the gunner, and make off long before he gets within shot. We have seen and shot immature birds in the neighbourhood of Weston-super-Mare. The Red-breasted Merganser is a common bird on the Cornish and Dorset coasts. In Poole Harbour it is said sometimes to appear in November in flocks of a hundred or more; the birds are then extremely wary, and few are shot.

A Red-breasted Merganser occurred at Plymouth in 1858, and two in 1863 (B., MS. Notes). A pair were obtained there in adult plumage, February 1881; two immature specimens appeared in Devonport Market, November 13th, 1882 (J. G., Zool. 1881, p. 198; 1883, p. 165).

One was shot December 1874, and another December 1876 (out of a flock of four), on Kingsbridge estuary, where females occur frequently during winter (E. A. S. E.). A male was killed at Beesands on the sea, and an adult male was caught in a crab-pot in April.

This Merganser occurred in some numbers on Torbay, 21st and 22nd December, 1869, and a female was shot there, February 22nd, 1870 (Von H., 1870, p. 2059).

A male and female on the Exe, February 26th, 1838 (F. W. L. R., MS. Journ. i. p. 94). Many immature birds were seen in February 1855 and January 1856. On January 15th, 1856, we saw a pair of adults near Topsham, and on January 17th of that year six were seen together on the Exeter Canal (W. D'U.). One December 27th, 1864. An adult male at Exmouth, December 1865 (R. C.), where another was shot by Mr. H. Dumbleton, February 3rd, 1875. Two were noted in a poulterer's shop in Exeter, December 8th, 1876. One was shot near Topsham by Mr. Clare Porter, October 7th, 1879. Two more at Exmouth, October 1888.

A female was seen May 26th, 1874, at the confluence of the Taw and Torridge (G. F. M., Zool. 1874, p. 4134).

[Hooded Merganser. *Mergus cucullatus*, Linn.

In 'Land and Water,' some years ago, Mr. Frank Gosden, a fishmonger of Exeter, recorded the occurrence of two Hooded Mergansers, but we have good reason to believe the birds referred to belonged to the last species. The Rev. H. A. Macpherson obligingly called our attention to a specimen he had been informed was in the Museum of Westward Ho! College, which was shot by one of the college boys on the Torridge, near Bideford, and was supposed to be a female Hooded Merganser. At our request

Mr. H. A. Evans, of Westward Ho! College, kindly sent the bird to us for examination, and we at once detected it to be a young female Smew.

The Hooded Merganser is a North-American species, and has occasionally been reported as having been obtained in this kingdom, but most of the instances have subsequently proved to be mistakes.]

Smew. *Mergus albellus*, Linn.

[White Nun, White Wigeon, White Merganser (adult male), Vaire-Wigeon* (female and young male).]

A winter visitor, of occasional occurrence, from November to March, on the South Coast during severe weather; sometimes penetrating far inland along the course of the larger rivers. Immature birds are most frequently met with, adults being scarce usually, but in January 1891 many occurred all over the county. When in full plumage this species generally occurs in pairs, but we know of cases in which several adult drakes have been seen together.

In its pretty pied plumage of glossy black and silvery white, and with its particoloured crest of the same contrasted colours, this small species of Merganser is a very conspicuous and beautiful bird. On the estuary of the Taw and Torridge it is not a rare winter visitor, old males in their full adult plumage being more frequently seen than young birds or females, contrary to what is experienced in the south of the county, where adults are rare. The Smew is not an easy bird to shoot, as on the approach of a boat it soon ceases to dive, and rising on wing, escapes with rapid flight. The only way to obtain a shot is to get the bird between the boat and the shore; it will then sometimes fly across the boat, presenting a chance to the gunner. We one morning saw six adults swimming together in a little flock at Instow, but could get nowhere near them. Adult drakes have been obtained from time to time on the Barnstaple river; one was shot during the severe winter of 1890-91, as far up as Tawstock Court. While we resided at Weston-super-Mare we used occasionally to see examples, in full adult dress, hanging up in the game-dealer's shop, which had been shot in the neighbourhood of the town, as well as females and young males. Mr. Cecil Smith records a beautiful drake which was shot on the river Tone, close to Taunton, and several were obtained on the same river during the hard winter of 1891. The Smew is occasionally procured in the winter off the Cornish coast, and is more numerous in the fleets and harbours of Dorsetshire, but adult males are rarely met with. In the winter of 1849-50 Mr. Mansel-Pleydell states that nine were shot in one week in the Portland Roads.

Well-authenticated eggs of the Smew are rare in collections. The late Mr. John Wolley was the first naturalist who obtained the nest in Lap-

* In North Devon the Weasel is commonly called a "Vair," pronounced "veer"; in South Devon a "Vare," "Vair," or "Vairy," pronounced "ferry," evidently from the French *vair*=fur; and, according to Col. Montagu, the Smew has been given the above name because of its Weasel-like head.

land, in 1857, where the bird was, unexpectedly, discovered to be a *tree-breeder*, laying its eggs in holes of trees or in the wooden boxes placed by the peasants for birds to nest in. A full account of this most interesting fact is given by Mr. Dresser ('Birds of Europe,' vi. p. 705, and 'Ibis,' 1859, p. 69, where Mr. Wolley records his discovery).

Five Snews occurred on Slapton Ley in 1809. A pair, shot on the Warren at Exmouth, were in the collection of Mr. Comyns, and some had been killed on the Tamar (E. M., Trans. Plym. Inst. 1830; Mag. Nat. Hist., 1837). A pair shot on the Exe, January 8th, 1838, are now in the A. M. M. (F. W. L. R., MS. Journ. i. p. 64). A young male in January 1844 was also shot on the Exe. One at Teignmouth, January 1850. One at Plymouth, February 23rd, and another, December 26th, 1853; a pair February 2nd, and one March 25th, 1855 (B., MS. Notes). One January 1854, at Cullompton. One January 26th, 1855, near Exeter. An adult male was shot on the Laira (J. B. R., Trans. Plym. Inst. 1862-63). A female killed on the Kingsbridge estuary in 1860 is in Mr. H. Nicholls's collection. One at Exmouth, January 24th, 1867 (C. S.). A pair were killed on the Dart, January 5th, 1871 (J. H. G., Zool. 1871, p. 2631). A female at Newton Abbot (R. C.). Several immature birds occurred at Plymouth, December 19th, 1875 (J. G., Zool. 1876, p. 4785). A female at Slapton Ley, December 30th, 1875 (R. P. N., Zool. 1876, p. 4803). Two immature specimens at Plymouth in December 1879, and an adult male seen in Plymouth Sound, March 11th, 1882 (J. G., Zool. 1879, p. 48; 1882, p. 457). A female was shot on Slapton Ley in January 1891 by Mr. W. V. Toll, and two adult males were seen there by Mr. E. A. S. Elliot. An adult male was shot on January 20th, 1891, by Mr. F. B. Mildmay, M.P., at the mouth of the Erme. Three adult males and three females were observed on Torcross Ley by Mr. A. F. Holdsworth, and one of the males was shot by him on February 2nd, 1891 (R. P. N.). An adult male was shot on the Exe estuary early in January 1891.

Order COLUMBÆ.

Family COLUMBIDÆ.

THE PIGEONS, OR DOVES.

The Pigeons are anomalous both in structure and habits, and the ingenuity of ornithologists has long been exercised to find a suitable place for them in a linear arrangement of birds. It is, however, generally acknowledged that they possess affinity with the Gallinæ or Poultry, through the Sand-Grouse, though they offer a marked contrast to that order in being strictly monogamous, the attachment of paired birds to each other being proverbial, whilst the Poultry are mostly polygamous. Moreover, Pigeons lay only two eggs at each sitting, and have several broods

during the breeding-season. The nestlings, or "squabs," are quite blind, naked, and helpless, instead of being covered with down, and able to run about and feed themselves as soon as hatched, like chickens. Pigeons feed their young with a kind of milky fluid, secreted by the crop, mixed with macerated food, poured by regurgitation directly into the mouths of their progeny. They have no gall-bladder, hence, according to some, their amiable disposition. They have only twelve or fourteen tail-feathers, and no after-shafts to the plumage, in which characters they agree with the Perching-Birds, as well as in their generally arboreal habits and in the structure of their feet. Their manner of drinking is quite different from all other birds, as they hold their bills in the water till they have quenched their thirst; and they neither sing nor utter any call-notes, their only voice consisting of the well-known "cooing" sound.

The Devonshire list of birds includes all the four English Wild Pigeons, or Doves, but only one of them, the Common Ring-Dove, is at all times numerous, generally distributed, and well known. Within the last quarter of a century, the Stock-Dove, far from a common species in the S.W. counties during the nesting-season, has established itself at a few places on the coast, both in South and North Devon, having been previously unknown in the latter part of the county. We had come to regard the Rock-Dove as extinct as a resident bird in Devonshire, but competent observers have recently detected a pair or two still frequenting their old haunts in the romantic neighbourhood of Lynton. The pretty Turtle Dove, a summer visitor to England, is distributed in small numbers in sheltered places throughout the West Country, but is far from being as plentiful as it is in the Midland and Eastern Counties.

Five specimens of the American Passenger-Pigeon have been shot at large in the British Islands, and the species has, accordingly, by some authors been included in the British list; but, as it has been largely imported from America, it is doubtful if the individuals thus obtained really occurred in a wild state, and the species is not admitted as British by Mr. Howard Saunders in his 'Manual of British Birds.' It has never been met with in any of the Western Counties. This singular Pigeon is stated to be one among a few species of American birds which are rapidly becoming extinct.

Ring-Dove. *Columba palumbus*, Linn.

[Wild Pigeon, Wood-Pigeon, Culver: *Dev.*]

Resident, abundant and generally distributed in wooded districts throughout the county. This fine Pigeon is to be seen everywhere in the S.W. of England, except upon the moors, and receives large reinforcements to its numbers in the winter months from flocks migrating from the east. Unfortunately, it is the most destructive bird to agriculturists of all upon the British list, and there is hardly a month in the year when it is not doing injury to the crops, and its mischief is but slightly counterbalanced by any good it does in feeding upon the seeds of noxious weeds, such as charlock, &c. It also multiplies at a great rate, generally having three broods in the year, and, being a very wary bird, it is not easily kept under. The Ring-Dove begins to make its nest as early as February, in mild seasons, a fir-plantation affording the favourite site; and we have found callow nestlings near Hatherleigh as late as the middle of October. Owing to the destruction by keepers of the Sparrow-Hawk, which largely preys upon the Ring-Dove, this mischievous bird has greatly increased, and is still increasing, throughout the kingdom. In the spring and summer, when we were lads, we used to mark the different Wood-Pigeons' nests in our immediate neighbourhood, and when the young were nearly fledged, took them from the nest, and kept them for a time in hutehes, fattening them on barley meal. The next process was to hand them over to the cook, who made them into a delicious pie. Throughout the autumn and winter the flesh of the Ring-Dove is very good eating, but it is dry at the time the birds are stealing grain from the ripening corn-fields, and is not worth much in severe frosts when turnips have formed their food. A friend once furnished us with an excellent recipe for cooking a Wood-Pigeon so as to imitate a Woodcock, which, from experience, we can strongly recommend. The Pigeon, after hanging a few

days, is drawn, and the intestines are replaced with the soft roes of two red herrings. It is then larded, roasted, and served up on buttered toast; and it will be found that the contents of the inside are a very good imitation of the delicate trail of the Woodcock. In the winter-time large flocks of Ring-Doves resort to woods to roost, an ash or an oak being their usual perch, and then is the time to lie in wait for them, and to give them a volley when they are thick together on a convenient branch. Or, good practice may be had by sheltering under some roughly constructed ambush in a fir-wood, and shooting the birds as they drop in one by one just before dusk. It is astonishing how quick the eye of the bird is in detecting the least sign of danger, and how marvellous the power of wing which then enables it, in a second, to change the direction of its flight, and to be off before the gunner can obtain a chance. Ring-Doves are easily tamed in confinement and become amusing pets. Col. Montagu has related how he once reared together a Common Pigeon, a Ring-Dove, a White Owl, and a Sparrow-Hawk, and how the somewhat incongruous companions lived together in great amity, the Ring-Dove being the master. In general the Ring-Dove is a very cowardly bird before any of the Falconidæ, the little Merlin, even, daring to fly at it, but on the Dart Mr. G. F. Mathew once saw a Peregrine put to flight by a pair of Ring-Doves. These birds appear to be somewhat liable to diseases of the mandibles, which prevent their feeding and lead to their dying of starvation; we have several times taken up with the hand birds with curiously malformed beaks almost in a dying state. In spite of the mischief he does, we count the Ring-Dove among our favourites, never molesting him when he nests near the house, as we love to hear his soft, mournful notes descending on our ears from "immemorial elms;" and like to see him strutting on the lawn in the early hours of a summer's morning, although he pay visits to the flower-beds and display a taste for the lupine-seeds. In the autumn, when out with the gun, we regard him as fair game, and, in general, he is pretty well able to keep himself out of harm's way.

In the Teign Valley Ring-Doves have lately become so numerous as to cause serious damage to the growing crops. The flocks which assemble in winter in the south of the county feed much upon beech-mast. In February we have found the crops of these Pigeons distended with the leaves and tubers of the Pilewort Crowfoot (*Ranunculus ficaria*). Great numbers are shot during the winter months, regular hunts being organized for their destruction in some localities, and a ready sale is found for all that are killed, as their flesh is so much esteemed for the table.

Stock-Dove. *Columba oenas*, Linn.

[Culver: *Dev.*]

Resident, and numerous at the landslip at Dowlands, near Axmouth, where it breeds (Henry Swaysland, *Jur.*, v. v. 1884). This species seems to

be extending its range westward in the breeding-season, as in July 1889 we saw eight Stock-Doves on Dawlish Warren; and Messrs. E. A. S. Elliot and R. P. Nicholls say that since June 1887 it has become rather common in the Kingsbridge district, and that it breeds on the cliffs between the Bolt Head and Hope (MS. Notes). The Stock-Dove also bred in Cornwall in 1886 and 1888 (Zool. 1888, p. 302).

During the years in which we carefully observed the birds of North Devon we never met with an example of the Stock-Dove, either alive or dead, and could never detect one among the numerous Pigeons brought into the Barnstaple Market, or hanging up in the game-dealers' shops; but it is certainly now established as a resident in small numbers on the coast in the neighbourhood of Ilfracombe, where Mr. O. V. Aplin tells us he is confident he saw two or three in the summer of 1887. There is also a specimen of the bird in the Museum of Westward Ho! College, which was shot close at hand. In the south of the county the Stock-Dove is now fairly common, and large flocks are occasionally noticed in the winter-time.

The Stock-Dove nests in hollow trees, in holes in banks, in crevices in old ivy-covered masonry, and in church-towers, sometimes beneath the shelter of an impenetrable furze-bush, and rabbit-earths in the sand-hills on the coast are favourite sites. In its habits it closely resembles the Ring-Dove, but does not coo, making instead a grunting sound. The Stock-Dove has a more southern range than the Ring-Dove, and is only a summer visitor to Northern Europe, and is said not to be found beyond the limits suitable to the oak. It takes its name from its fondness for the *stocks* of trees, *i. e.* for trees which have been pollarded, and whose tops, in consequence, are thick and bushy. When these trees become hollow, as they often are, they afford the Stock-Dove, in inland districts, its favourite nesting-station. The Stock-Dove can be easily distinguished, when on wing, from the commoner Ring-Dove, for, as Mr. Dresser states, its flight "is lighter and more elegant, and when it rises on the wing it does so without the loud flapping sound almost always produced by the Ring-Dove." Its darker colour, and somewhat smaller size, also assist in its recognition. "In all its movements the Stock-Dove is graceful, and it walks on the ground with ease, progressing by short steps like the tame Pigeon, every now and again nodding its head as it walks. When seated on a bough or branch it sits rather upright; and it usually has some favourite perch, where it will sit early in the day preening its feathers in the morning sun: it most frequently selects some very elevated branch, from which it can have a tolerably clear view of the surrounding country" (Dresser, 'Birds of Europe,' vol. vii. p. 26).

The Stock-Dove is not so shy and wary a bird as the Ring-Dove, and is very affectionate to its mate.

We consider the flesh of the Stock-Dove, especially that of young birds, to be both sweeter and of better flavour even than that of the Ring-Dove, though the latter is usually excellent.

Mr. J. Barnes, formerly head gardener at Bieton, near East Budleigh, in an article published in the 'Exeter Gazette,' about 1868, speaks of

“Stock-Doves” breeding in trees there. Formerly, however, it appears to have been only an irregular winter visitor to this county, appearing in large flocks when beech-mast was plentiful. Both Dr. E. Moore and Bellamy speak of flocks in winter, and the Rev. Thos. Johns says, “I have occasionally seen flocks of a middle-sized, dark-blue Pigeon, amounting to many hundreds, flying about the valley of the Tamar in the latter end of autumn, the weather being mild, but have never been able to procure any of them” (Bray’s ‘Tamar and Tavy,’ vol. i. p. 351). Mr. J. Gatecombe mentions in 1872 that at the approach of winter multitudes of Stock-Doves make their appearance in the woods at Tiverton, but states that it was very rare in the neighbourhood of Plymouth (Zool. 1872, p. 3398). He also records some in Plymouth Market in June 1881, said to be the first ever received there, and observes that flocks annually visit the more eastern parts of Devon in November (Zool. 1881, p. 196). Some were killed at Pamphlete, near Plymouth, in January 1885 (Zool. 1885, p. 376). We never met with any Stock-Doves ourselves near Exeter until the winter of 1868-9, when flocks occurred in that neighbourhood, and again in November and December 1872. We saw a pair near Topsham on March 8th, 1876, and one April 8th, 1883. Pigeons seen by us about the cliffs between Teignmouth and Dawlish in November 1874 and April 1880 may have belonged to this species (W. D’U.). Probably the flock of thirty Pigeons reported to have been seen in North Devon in 1875 consisted of Stock-Doves (Zool. 1875, p. 4299). A young bird was shot in Ilton Wood, near Kingsbridge, at the end of August 1876. Many pairs were seen breeding on the cliffs near the Bolt Head at the end of May, and a small flock of these birds was seen and one shot at Collapit, near Kingsbridge, October 31st, 1887; and in August 1889 a large flock was met with about Rowdon, and one bird was shot (E. A. S. E.).

A few Stock-Doves haunt the cliffs to the west of Ilfracombe, and probably breed in some likely-looking holes and fissures (O. V. A., Zool. 1887, p. 71).

Flocks of Stock-Doves are occasionally seen in winter. At the time Mr. E. H. Rodd’s book on the Birds of Cornwall was published (1880), no instances of the Stock-Dove having bred in his county were on record; but in May 1886 Mr. F. R. Rodd detected a nest in an oak tree, and three more in rabbit-earths in some gravel-pits on his estate of Trebartha, near Launceston, proving that, like the Starling, the Stock-Dove is extending itself as a resident westwards in Cornwall. In Dorsetshire Mr. Mansel-Pleydell considers this species to be on the increase, and states that numbers nest in the rabbit-earths in the sand-hills on the coast. Throughout Somerset the Stock-Dove nests in a few scattered pairs, generally in old pollard trees, but is nowhere numerous. In West Somerset, during a deep snow, we shot a number of Wood-Pigeons by lying up in a thick hedge, and waiting for the birds as they passed over to feed on some turnips, and among them obtained a Stock-Dove, but we never saw any flocks composed entirely of this species. The Stock-Dove is rarely seen in the east of Somerset, and the only example which has occurred to us was one we shot in our own shrubbery.

Rock-Dove. *Columba livia*, Bonnat.[Cliff-Culver, *Dev.*]

An occasional visitor to some localities on the sea-coast, and a few are said to breed in the caves or fissures of the sea-cliffs.

“Near Orchard in Combmartin there mounteth up a hill to a great height,” says Risdon, “just upon the cliffs of the sea, where in a hole, infinite numbers of doves do frequent, called by a particular name of the place Cliff-Culvers.”

Polwhele states (*Hist. of Devon*, vol. i. chap. 6) that the Rock-Dove existed in his time (1797) on the north coast near Combe Martin, and at Lundy Island. There are none at the latter locality at the present day, and there have been none since we became acquainted with the island. It was formerly also found on the rocky parts of the South Coast (*E. M.*, *Trans. Plym. Inst.* 1830; *Mag. Nat. Hist.* 1837). The earlier writers on Devonshire ornithology, however, seem to have confused this species with the Stock-Dove, and it is therefore difficult to decide to which species their observations apply.

A “Rock-Dove” was shot in December 1818, near Egg Buckland (*E. M.*, *Rowe’s Peramb. Dartmoor*, 1848). The Rock-Dove was found on the rocky parts of the Dart between Dartmouth and Totnes (T. and K., 1830). Bellamy says he saw one in June 1839 on the rocks in a small cave at Dartmouth (*Nat. Hist. S. Devon*, p. 209).

Mr. E. A. S. Elliot writes:—“There is no doubt that this species breeds in an extensive quarry-pit, now disused, near Beesands, and also near the Start Point, as I have seen old birds about there in the spring, but whether they are descendants from escaped tame birds, as some assert, I am not prepared to say. I shot two immature birds in the fall of 1889 which were apparently wild.” (*MS. Notes.*)

Although it is extremely probable that in some instances stray farm-yard Pigeons which have taken to the cliffs, and also Stock-Doves, have been confounded with this species, we are confident both from our own knowledge, and also from the reports of observers who are not likely to have been in error, that a few Rock-Doves still exist on the cliffs of North Devon. Only this last spring (1891) Mr. H. A. Evans, of Westward Ho! College, wrote to inform us that a pair were seen at Northam. We were spending part of the Long Vacation in 1856 with a reading-party at Lynmouth, and continually saw three or four pairs of Rock-Doves on the Countesbury Hill, and quite recently the birds have been detected in the same locality. We one day got close to an undoubted Rock-Dove near the Cricket Field at Instow, and heard of others having been seen on a stubble-field a little distance inland.

The two dark bands upon the wings, and also the conspicuous white rump, are sufficient distinctions to prevent the Rock-Dove from being confounded with any other species, but will not serve as a distinction from the Common Domestic “Blue Rock,” which sometimes becomes wild and associates with Ring-Doves and Stock-Doves. Such a specimen was

shot on Black Hill, near Woodbury, in 1878, and is now preserved in the A. M. M.

"Blue Pigeons" frequent the chalk cliffs between the fishing-village of Beer and Beer Head; but Mr. Gatecombe, who visited the place on purpose to try and identify the species, was unable to do so with certainty, on account of their wildness. He, however, had not much doubt that the birds he saw were either genuine Rock-Doves or "very wild tame Pigeons" (J. G., *in litt* to R. P. N.).

In flight the Rock-Dove is the swiftest of the family, strong on wing as they all are, and it requires a good shot to account for one as it darts out from a cave amongst the cliffs.

All our domestic Pigeons, greatly as they differ in their varieties, are descended from the Rock-Dove, and show their descent by their reluctance to perch on trees.

There used to be a few Rock-Doves on the North Somerset coast. We have seen them at Uphill, near Weston-super-Mare; also on Brean Down; and early one morning at the end of May, when we were watching Burrow-Ducks on Sand Point, between Weston-super-Mare and Clevedon, we came close on a Rock-Dove seated on her nest, and almost touched the bird with our hand.

Mr. Rodd states that there are a few at Looe and Polperro, on the south coast of Cornwall, and there may be, perhaps, a pair or two on the Dorset coast.

Turtle Dove. *Turtur communis*, Selby.

A summer migrant, visiting suitable localities throughout the county, but it is usually far from numerous. Breeds. Arrives at the end of April or early in May, and leaves in September. The Turtle Dove frequents marsh-land in the estuary of the Exe in small parties in June and July. Flocks of considerable size used to visit Dawlish Warren in summer; we saw a flock there of about forty on July 17th, 1854, and shot one. This bird is also not uncommon near Exeter. It is rare near Plymouth, but breeds in the woods at Kelly on the Tamar (J. G., *Zool.* 1877, p. 493; 1878, p. 433). From a young bird having been obtained at Gnaton, in August 1850, Mr. R. A. Julian thought it occasionally bred there ('Naturalist,' 1851, p. 88). It is, however, usually met with solitary in the Plymouth district, South Hams, and in West Devon in May and September, when migrating (J. G., *Zool.* 1875, p. 4569; J. B. R., *MS. Notes*; T. J. Bray's 'Tamar and Tavy,' i. p. 351). Montagu states that "it is found, though rarely, as far westward as Devonshire" (*Orn. Diet.*). Dr. E. Moore says it was more numerous on the woody borders of the moor (*Mag. Nat. Hist.* 1837). Every summer some breed in the Kingsbridge district, and are frequently met with either singly or in pairs upon the roads (R. P. N.). "Breeds in Oxon Wood and Combe Royal" (E. A. S. E.).

This pretty Dove, although numerous as a summer visitor to many parts of the kingdom, is one of those species whose dispersion to the extreme west is limited in numbers. In North Devon a pair or two are generally to be seen near Fremington; we have seen a pair close to South Molton; and we have from time to time encountered a single Turtle Dove, or a pair, upon the road, in driving through the north of the county. On Lundy Island we are assured by the Rev. H. G. Heaven that this Dove has occasionally nested in a small patch of stunted cover. The Turtle Dove is generally first noticed at the beginning of May, and leaves this county about Michaelmas. We have a note of one which we saw in our own grounds as late as October 23rd. Where the Turtle Dove is numerous, as it is in some of the midland counties, we have known it to be sometimes sociable at the nesting-season, and once found three nests together in a large thorn bush. In Somerset we have found a hedgerow elm to be the favourite situation for the Turtle Dove's nest. This Dove is fond of tall trees, perching among the higher branches, whence, unseen, it utters its soft monotonous cooing notes, which on a hot summer's day come with a soothing sound to anyone seeking the shade beneath. In the days when there were Fens, great numbers of Turtle Doves used to flock into the high sedge, finding some favourite food on the sheltered ground, and afforded good shooting as they were flushed and flew straight off over the tops of the sedge; but, in our opinion, they are only indifferent birds for the table, and we never molest them when they rise before our gun. Around Taunton the Turtle Dove is not uncommon, but throughout Somerset it is very local in its distribution, there being districts where we have never seen one. Mr. Rodd mentions a flock of thirty-four Turtle Doves having been seen on the Scilly Islands in May 1871. Mr. A. G. More ('Ibis,' 1865, p. 142) states that, although the Turtle Dove is occasionally seen in Cornwall, it is doubtful if it nests in the county, and we possess no information upon the point. In Dorset it is about as plentiful as in Devon as a summer migrant.

[*Observation*.—The Collared Turtle (*Turtur risorius*), so frequently kept in confinement, has occasionally been killed in a wild state near Plymouth, and is said to breed in some of the large woods and plantations in that neighbourhood (Zool. 1877, p. 493).]

Order PTEROCLETES.

Family PTEROCLIDÆ.

Pallas's Sand-Grouse. *Syrrhaptes paradoxus* (Pall.).

An accidental visitor, of very rare occurrence. Like the rest of England, Devonshire was visited by flocks during the great irruptions of this species in 1863 and 1888.

Although there are two species of Sand-Grouse (*Pterocles*) which are not uncommon in Portugal, Spain, and N. Africa, this country has never been visited by stragglers of either, though it would be nothing extraordinary if some had done so, considering how many birds have wandered to our Devonshire coasts from those parts of the world; it has been reserved for a very singular species, a native of the vast sandy steppes of Central Asia, to introduce the family to British ornithologists. The irruption of Pallas's Sand-Grouse into Western Europe in 1863, and again, a quarter of a century later, in 1888, may justly be regarded as the most sensational ornithological occurrence of modern times. Professor Newton drew up in 'The Ibis' for 1864 a full and particular account of the visitation of these birds to the United Kingdom in the first irruption, accompanied by a map, on which all the localities where they were observed and reported are set down. We find these to be very numerous along the whole extent of the South-east and East Coast of England, beginning at Eastbourne and extending north to Berwick-on-Tweed; there are a few marked on the East Coast of Scotland, but very few indeed anywhere on the Western shores of the kingdom, and inland the appearances of the birds were chiefly limited to the Eastern and Eastern Central Counties. In the map there is not a single occurrence marked for either Somerset or Dorset; in the whole of Devonshire there are only two—Slapton Sands in the south, and Heanton, near Barnstaple, in the north of the county. Two specimens only were recorded from Cornwall—a female shot at the Land's End, and a male, picked up dead at St. Agnes, on the Scilly Isles. The birds were first noticed in England on 21st May (in Northumberland), and we believe the female shot at Heanton, in North Devon, on 11th December, was the last reported for the year. Although Professor Newton calculated that as many as 700 were recorded in the United Kingdom, he did not believe that the main body crossed the North Sea, being brought up by the shores of Holland and Denmark, and passing the summer on the sand dunes of those countries. The year 1888 witnessed as great, if not a greater, arrival of Sand-Grouse in this kingdom, the birds again sweeping gradually across Central Europe from their Asiatic habitat, and trending constantly in a N.W. direction until numbers of them were dispersed over the British Islands, and on this occasion they nested and reared their young in several places on the Eastern Coast of Scotland. As in 1863,

the greater number of occurrences were reported from the Eastern and North-eastern Counties ; but in this second visitation the birds treated the West of England more liberally, having been recorded from all the four counties of the S.W. Peninsula. In North Devon a flock of seven appeared on Lundy Island, and remained there for three weeks without being shot at or molested. Mr. J. G. Hamling, of The Chase, Barnstaple, recorded one forwarded to the bird-stuffer in that town, which had been shot with three or four others (we fear this may have been the little Lundy flock) at Hartland, about the 3rd or 4th of June. None appear to have been obtained this time in the south of the county. In Somerset a flock of eleven appeared on May 25th, on Steart Island, in Bridgwater Bay, and one was shot. On the afternoon of the same day two were seen at Charlynch, near Bridgwater, by the Rev. W. A. Bell, the Rector. A small flock passed close to Mr. W. Ayshford Sanford, in his grounds at Nynhead one Sunday, the date of which is unknown to us. This was only a short distance from the eastern boundary of Devon. One is reported to have occurred at Burnham, and we heard of some having been seen near Weston-super-Mare: one was exhibited at a meeting of a Naturalists' Club in Bristol, which had been shot somewhere near the city in Somerset. We ourselves were not lucky enough to see any of the Sand-Grouse on the occasion of their visit to this country in 1863, but were more fortunate at the end of June 1888, when we passed close to a flock of upwards of twenty as we were driving to Bath. They were in a turnip-field where the young turnips were just showing above the ground, and were about a long gunshot in from the hedge. On first noticing them we took them for Turtle Doves, but as we have never in this part of Somerset seen more than a single Turtle Dove, or at most a pair, at a time, we looked more closely at the birds, and then easily detected them to be Pallas's Sand-Grouse. Only a few days before we had watched and studied a live Sand-Grouse in the Western Aviary of the Zoological Gardens, and at once recognized the same waddling gait in the few birds which were moving. The greater number were squatting on the ground, apparently asleep; one or two were preening their feathers, and occasionally stretching themselves, with precisely the same gestures as the bird we had seen in London. We looked out for them again as we repassed the spot in the afternoon (it was in the parish of Norton St. Philip), but they had disappeared.

In Dorsetshire, Mr. Mansel-Pleydell recorded six which were picked up dead or dying, on May 28th, under the telegraph-wires, at Stoborough, Wareham. Mr. G. B. Corbin (*Zool.* 1888, p. 388) states that at the end of June, or beginning of July, a flock frequented a sandy piece of heathland on the borders of Dorsetshire and Hampshire, and that several were killed and eaten; and, further, mentions a male bird which was killed on 18th June in a garden near Wimborne, which was terribly mutilated. In the Land's End district, in Cornwall, a flock of eleven appeared in May: three were killed, and one captured alive. This bird Mr. Thomas Cornish, of Penzance, succeeded in keeping alive for three months, when it unfortunately died during its moult (*Zool.* 1888, p. 348; 1889, p. 108).

Mr. Cornish records that he received another Sand-Grouse, a male, which had been shot on January 3rd, 1889, at Kelynack, in St. Just-in-Penwith, the same place from whence he had obtained his live bird. These appear to be the only occurrences reported from Cornwall; but we cannot resist the supposition that in all of the S.W. counties Sand-Grouse may have been seen, and perhaps shot and eaten, without being either identified or recorded. People with no knowledge of birds might well take them to be either Plovers or Pigeons.

The Sand-Grouse which arrived in the United Kingdom in May and June 1888 continued with us until the beginning of the following spring, when they gradually disappeared. In many places great care was taken to protect them, in the hopes that they might remain and nest; but when the restless spirit of migration came upon them they wandered off—and whither? Did they press westwards, to perish on the Atlantic, or did any of them safely return to their distant Eastern home by the shores of Lake Baikal?

The name conferred by ornithologists upon the Sand-Grouse sufficiently indicates what a strange bird it is. The specific name given to it is *paradoxus*, surprising: for, in appearance, it is something like a Pigeon; it flies with great velocity, somewhat resembling a Golden Plover when on wing; its legs and feet are feathered like a Grouse, and its tail has the two central feathers elongated and terminating in a narrow point. Its generic name, *Syrhaptes*—"sewn together," refers to its toes, which are united together, and remind one of the fingerless gloves worn by babies; the under surface of the foot is covered by a hard skin, so that the birds can conveniently run over the heated sands. Their united toes occasion the waddling gait we have already described. All the Sand-Grouse have their upper parts coloured with tawny yellow of darker or paler shades, corresponding with the tints of the sandy steppes which are their native home; some of them have bright belts of black or orange on the lower parts of the body, but when the birds squat these conspicuous colours are hidden, and the protective tints of the plumage of the head, wings, and back make it extremely difficult to distinguish them upon the ground.

We have in our collection specimens which were among the first killed out of the 1863 arrivals: two shot by Mr. W. C. Mathew, of the 64th Regiment, at Aldershot, on 26th May, in that year. The 64th had but just returned from India, and the Major of the regiment came across and recognized a flock of Sand-Grouse on the heath, reporting them as "Sindh Doves," a name given to the Pintailed Sand-Grouse (*Pterocles alchata*, Licht.), which is very abundant in N.W. India, and is also a common species in North Africa and in the South of Spain. We have no knowledge of Pallas's Sand-Grouse ever having been detected in India.

The causes which led to the wandering off from their native home of these great armies of Sand-Grouse can only be conjectured. Perhaps they had become congested in some particular district, and there had been a failure in some necessary food; all the streams and lakes of the country in which the flocks collected, and from whence they started, may have been

dried up; and without drinking water regularly twice a day Sand-Grouse cannot exist.

A pair of Pallas's Sand-Grouse were shot by Mr. Anning, of the Royal Sands Hotel, Slapton Ley, out of a flock of thirteen in June 1863. The birds settled on the sands between Torcross and the hotel. They are now in the possession of Sir Lydstone Newman, Bart., at Stokeley House, Stokenham ('Field' for July 4th, 1863; *Zool.* 1863, p. 8721; H. N., MS. Notes). An old female was shot by a game-keeper at Heanton Court, near Barnstaple, December 11th, 1863 (J. L. Langdon Fulford, and M. A. M., *Zool.* 1864, p. 8958). Several were shot at Hartland about June 3rd or 4th, 1888 (J. G. H., *Zool.* 1888, p. 266).

Order GALLINÆ.

THE GAME BIRDS.

The indigenous Game Birds of Devon are but few. In fact but three of the British species can be claimed as genuine natives—namely, the Common Partridge, Quail, and Black Grouse, the first and last being residents, and the second migratory. Of these three the Partridge alone is abundant and increasing in numbers, owing to the improved cultivation of the land; whilst from the same cause the Black Grouse, or Heath Poult, as it is called in Devonshire, has decreased, and is now but scantily represented. The Common Pheasant and Red-legged Partridge are introductions, the latter being, happily, not yet naturalized, whilst the former, largely crossed with the Ring-necked Pheasant, is artificially reared in large numbers in the preserves all over the county, except in the wild open moorlands. But little credit can be attached to the reported occurrence of the Red Grouse and Ptarmigan on Dartmoor, and at best it could have been only accidental.

Owing to the Gallinæ nesting on the ground, breeding but once in the season, and laying a large number of eggs at a sitting, they are more liable to extermination than other birds, and need protection to enable them to exist. Agricultural operations lead to the destruction of many

nests, and the eggs, being so numerous and of a light colour, are readily seen, though in some cases the parent birds have the instinct to cover them up with leaves on leaving the nest. The hen birds are so much like the colour of the soil, and lie so close when on the nest, as not to be readily seen, and, moreover, appear sometimes to lose their scent when sitting, so as not to be found by a dog or fox; yet, when sprung, their nests are at once betrayed. Most Gallinaceous birds are polygamous, but the Common Partridge, the Red Grouse, and perhaps the Quail, are exceptions, being monogamous, and pairing in spring.

Family PHASIANIDÆ.

* Pheasant. *Phasianus colchicus*, Linn.

Introduced, semi-domesticated, and plentiful, where artificially reared and preserved. It is, however, now difficult to obtain a pure-bred specimen, as, through interbreeding with *P. torquatus*, the Ring-necked Pheasant, specimens with white rings round the neck, or with more or less white on its sides, are by far the most plentiful. Other varieties are frequently met with—pure white, white-tailed, pied, mottled, and buff-coloured “Isabelline,” or “Bohemian.” Dr. E. Moore mentions that a hybrid between a male Pheasant and a female Black Grouse was shot at Whidey, near Plymouth, by the Rev. Mr. Morshead (Mag. Nat. Hist. 1837), and several other instances will be mentioned under Black Grouse. Mr. John Gatecombe describes a curious hybrid between a Domestic Fowl and a Common Pheasant killed in a wild state in Dec. 1883, at Membland, between the mouths of the Yealm and Erme, the property of Mr. E. C. Baring. It was a remarkably fine bird, weighing within one ounce of six pounds. The plumage exhibited equally the character of both species. The keeper who shot the bird said there were several similar specimens in the covers. It had a very large and long spur on one leg only, the other leg being similar to an ordinary hen Pheasant (Zool. 1885, p. 21). Mr. J. C. Mansel-Pleydell mentions a similar hybrid (‘Birds of Dorset,’ p. 69). Such hybrids are known as “Peros.”

Polwhele mentions (1797) that Pheasants had been almost annihilated in Devon, but were beginning to increase again when carefully preserved. In 1830 they were common in the neighbourhood of Mamhead, Kenn, and other preserves (T. & K.). The Rev. Thos. Johnes, Rector of

Bradstone in the extreme western portion of Devon, in a letter on the Birds of Dartmoor, written about 1832, published in Bray's 'Tamar and Tavy' (vol. i. p. 351, 1844), says "the Pheasant has been introduced of late years by the Duke of Bedford and Sir W. P. Call. The ringed-neck variety is the most common." Dr. Thos. Shapter, in his 'Climate of the South of Devon,' 1842, states that the Pheasant was, he believed, introduced into the county only about sixty years before he wrote. This probably applied to *P. torquatus*, as the beginning of the present century was about the period of its introduction into this country. The common Pheasant, however, has been proved to have been of ancient importation into England, and it was sufficiently abundant in the neighbourhood of London to be recognized as a regular article of diet in the middle of the 11th century. The Romans certainly introduced the Fallow Deer, very probably the Rabbit, and, perhaps, the Pheasant also. It is an interesting fact that the metatarsal of a Gallinaceous bird, either a Domestic Cock or a Pheasant, was found amongst the bones deposited in the ancient camp on the summit of Peak Hill near Sidmouth, and a similar specimen is in the A. M. M. from the Bench Cavern, near Brixham.

The Pheasant, the most beautiful of our game birds, has now been for so many hundred years established in our woodlands that it may almost rank among our indigenous avifauna, although, as its name indicates, it was originally imported into Europe and this country from the banks of the Asiatic Phasis. So greatly have its numbers increased of late years, owing to its careful preservation, that it now forms a valuable and important addition to our food supply. Several varieties of the Pheasant from China and Japan have been introduced into our preserves, some even surpassing the old red bird in beauty of plumage, but all of them possess an undesirable qualification in being addicted to straying off beyond their proper bounds. The beautiful Chinese Ring-necked Pheasant (*P. torquatus*), brought over to this country now nearly a hundred years ago, has almost established itself throughout the kingdom, and by interbreeding with the Red Pheasant, and by proving itself to be the dominant species, is—and we consider this a circumstance to be greatly deplored—fast obliterating the handsome Pheasant which for so long had sole possession of our covers. Some forty years ago all the wild-bred Pheasants in the woods we were acquainted with in North Devon belonged to the red species, but we imagine that at the present time an infusion of the Ring-necked strain has extended into all parts of the county, and pure, unmixed, descendants of the ancient stock are yearly becoming more rare. Although Pheasants require careful watching, no other bird possessing a greater variety of enemies; yet birds of the Red and Ring-necked species will thrive very well if left to themselves, rearing stronger broods than any the keepers can bring up under coops. In rough parts of the country, where there are a number of stiff furze brakes, it is almost impossible to exterminate the Pheasant, as he finds shelter from which he cannot be dislodged, and plenty of suitable food. In such districts, about Christmas-time, we have shot grand cock birds, of fully 4 lbs. weight, whose flavour greatly surpassed that of the overfattened birds of the preserves. There is

no part of the United Kingdom where the Pheasant, a most hardy bird, does not do well, provided the country be such as suits its requirements. The first essential is that there be plenty of water, and woods containing rough undergrowth, in which this timid bird can shelter itself. It also loves a district where there are thick, old-fashioned hedgcrows, with a good stock of timber, especially oaks, as in the autumn the acorns constitute its favourite food. In the blackberry season Pheasants wander far in search of the berries, and most sportsmen must have noticed the luscious juice oozing from the gape of the bird the gun has just dropped amid the fern. Most berries are dear to the birds, and they thrive well in moorland coverts where the whortleberry abounds. In long-protracted and deep snows we have picked up dead and frozen hen Pheasants in the woods, but we never knew a cock bird to succumb to the weather, however severe.

The day after a battue the survivors appear to be stunned and frightened by the noise of the guns, as we have picked up uninjured birds squatting beneath the bushes. The short crow of the cock Pheasant, with the sound of his clapping wings, may be heard in the spring-time in the woods he frequents. This noise is intended to attract the hen birds, and is equally a challenge to other cocks. The cock Pheasant is rather a noisy bird, often bringing himself into trouble by his voice: thus, the cackling he makes at roosting-time as he flies up into the trees betrays his perch to the poacher; his crow and his loud rustling wings, on being flushed in cover, generally bring him to grief, when, had he risen quietly, as a Grouse slips up from the heather, he might, perhaps, have got off without attracting attention. He sometimes rises with reckless precipitation, and colliding against a branch, falls wounded to the ground. As a rule, cock Pheasants seek their safety by running through the covers: it is only when suddenly surprised they take wing; and as they run off they drive up the hens in selfish cowardice to screen their own retreat. But these tactics are of little avail, as the fatal fence is at last reached, where the beater's stick compels them to come forth, and then there is the "bouquet," to use the language of the battue, and the "warm corner," where the long-tailed beauties rise by scores to fall again upon the sod, to be carted off to the poulterer's shop.

One day in August, on the other side of a narrow valley, we noted a cock Pheasant on a stubble-field in a state of great agitation. He was making a loud chuckling, was drawn up to his full height, and was looking steadfastly towards one point. Turning our eyes in the same direction we beheld a poaching cat stalking some dozen or more young Pheasants which were feeding in the stubble a little distance beyond this gallant cock-bird, who was evidently doing his best to warn them and to divert the approaching enemy. We did not wait to see what would happen, and hastened to the spot, but the cat had fled before we arrived on the scene. Pheasants are sometimes embarrassing in their tameness. We do not merely refer to the battue—where, posted at our corner outside the cover, we have watched a score or more walking unconcernedly just inside the fence, quite ignorant that it was expected of them to rise on

wing to be shot, and when at last the beaters compelled them to fly, it required considerable hardening of the heart to lift our guns against them—but to the conduct of tame reared birds on other occasions. We had one splendid ring-necked cock, who, after fighting with and driving away all the other cock-birds, took possession of the flower-garden, and at breakfast time would come and peck at the window until he was admitted. Taking up his station by the side of his mistress, he would stand, now and then giving vent to a hoarse grunt, until the conclusion of the meal, when he attended her wherever she went about the house, upstairs and downstairs, and if she went into the garden he would follow, sometimes in playfulness pecking at her dress and hanging on to it behind by his beak. Wishing to shake him off, refuge would be sought in the kitchen-garden, and the door would be shut in his face; all of no use, as he immediately flew over the wall, continuing his attentions as before. One Sunday he actually accompanied us to church, a quarter of a mile away, running by our side all down the avenue, and only leaving us as we entered the churchyard gate.

Col. Mathew, who six or seven years since killed a number of Pheasants at big "shoots" in East Devon, has informed us that the proportion of red birds was full seventy-five per cent. of the entire bag, and states that one morning on Captain Simcoe's estate, near Honiton, he shot two very fine red cocks, which were weighed when the party went into the house for lunch, and sealed just nine pounds.

* Red-legged Partridge. *Caccabis rufa* (Linn.).

[French Partridge.]

Introduced. A few have been shot from time to time in various parts of the county. This species was most probably introduced within the last fifty years, as Dr. E. Moore does not include it in his list of Devonshire birds published in *Trans. Plym. Inst.* 1830, although in his appendix to Rowe's 'Perambulation of Dartmoor,' published in 1848, he says, "Mr. Newton shot one of these on Broadbury Moor, near Bridestow, which is now in his collection." Bellamy, in his 'Natural History of South Devon,' published in 1839, does not mention it. We had in our possession for some time one which was shot by the late Mr. Thos. Floud, about 1844, on Waddle Down, near Whitstone Hill, a few miles from Exeter (W. D'U.). Two occurred in North Devon in Jan. and Feb. 1856.

In the MS. notebooks of the late Mr. Bolitho, bird-stuffer, of Plymouth, kindly lent us by Mr. J. Gatecombe, we find that he had received one of these Partridges which had been shot by Capt. Roe at Worswell Farm, on Dec. 4th, 1858. Another was met with on March 25th, 1862, at Tamerton Foliot. Mr. Bolitho had other specimens of "French Partridges" brought to him in October 1865, June and July 1867, and August 1872, which were probably killed near Plymouth. One shot near the Start Point in the winter of 1867 was the only example of the Red-legged

Partridge Mr. R. P. Nicholls has ever met with (R. P. N. and E. A. S. E.). We have seen some exposed for sale in the poulterers' shops in Exeter, which were brought from Wiltshire as we were informed. One which we saw hanging up on Oct. 3rd, 1882, however, was said to have been shot near Okehampton.

We learn from Mr. Edmund Elliot that Mr. Lucas of Stokeley, near Kingsbridge, has recently attempted to introduce this bird on his land, but that none have as yet been shot.

This species of Partridge, well-known to and little liked by the sportsmen of the Eastern Counties, is never likely to be more than an occasional straggler in the West of England, where the climate is too damp to suit the bird, and we believe all attempts to introduce it as a resident have failed for this reason. We speak with a due warrant for this assertion, as a friend of ours has repeatedly endeavoured to naturalize the Red-legged Partridge on his ground in N. Pembrokeshire, where the climate is similar in its humidity to that of Devonshire, and although he has hatched, and in due course turned loose, fifty or sixty healthy Red-legged Partridges at a time, they were nowhere to be found when the shooting-season arrived, having deserted a country which was not congenial to them. Nor were they met with anywhere else in the district, and we have only in our notes the record of one example of this Partridge which was ever obtained in Pembrokeshire, one shot by Mr. Moore, the head keeper at Picton Castle. Many years ago Lord Cawdor attempted to introduce the Red-legged Partridge on his Staekpole estate, and also failed. In Somerset this Partridge is only an occasional visitor; Mr. Cecil Smith has recorded no instance of its occurrence, but we have heard of several in the eastern portion of the county; and Mr. Rodd states that in September 1879 Mr. C. Edwards, of the Grove, Wrington, "shot a brace on the manor of Compton Bishop, in East Somerset, where the keepers informed him that others fed in the coverts with the Pheasants" (Rodd, 'Birds of Cornwall,' p. 77). In his own county Mr. Rodd says the Red-legged Partridge is unknown. In Dorset Mr. Mansel-Pleydell informs us that all attempts to establish this species as a resident have failed, as in the instances we have mentioned above, and probably from the cause we have assigned.

The Red-legged Partridge, or "Frenchman," as it is most commonly called, was first introduced into England in 1770. In the first volume of his 'Birds of Norfolk,' p. 413, Mr. Stevenson has recorded the curious fact that there is now an emigration of this Partridge from the Eastern Counties to the Continent every spring, in the month of April, and gives very interesting particulars of this movement on the part of the birds.

[*Observation.*—The Barbary Partridge (*Caccabis petrosa*, Gray) recorded by Mr. Rodd as having been shot near Falmouth was, without any doubt, an escape. A lady of our acquaintance kept at that time in Falmouth several tame Barbary Partridges in her aviary, and this we believe to have been one of her birds.]

Partridge. *Perdix cinerea*, Lath.

Resident, generally distributed throughout the county, except the wilder parts of Dartmoor, and in some years is fairly plentiful.

Owing to the improved farming, and the enclosure and ploughing up of many commons and salt-marshes, during the last half-century, the Partridge has largely increased in numbers in Devonshire, so much so that in the Jubilee year (1887), which was a grand season for Partridges all over England, we knew of fifty-brace bags having been obtained in North Devon. In the September of that year six hundred Partridges were taken off the Tawstock Court estate, close to Barnstaple—a large number for a shooting in a part of the kingdom with so poor a reputation for Partridges. In the Kingsbridge district, in the south of the county, as many as sixty-five brace have been killed in a day.

The Partridge likes the neighbourhood of the sea, and is plentiful among the ferns and grasses on the cliffs on many parts of the North Coast, and here, directly the covey is flushed, it dips down over the sidling and takes refuge on some inaccessible ledge. On the edges of Dartmoor we find a very fine strain of Partridge; the birds are heavier and have brighter plumage, take long and bold flights, and well repay the fag required to bring a brace or two to bag.

Varieties of the Partridge are rather rare. We possessed a very pretty silver-grey bird, which was shot near Torrington about 1855.

In the collections of the Rev. W. S. Hore, at Barnstaple, Mr. Scott, of Chudleigh, and in the Truro Museum, we have seen examples of a peculiarly dark Partridge, which we regarded as melanistic varieties; these birds were slightly larger, apparently, than the ordinary bird, and darker than the little dark Partridges one is familiar with on the Scotch moors. Mr. Hore obtained these large and dark birds several seasons in succession from Shebbear, and was disposed to consider them a cross between the Common and the Red-legged Partridge, but there was nothing about them to indicate any strain derived from the latter bird.

In the Report of the British Association, Exeter Meeting, 1869 (Trans. of Section, p. 117), will be found a notice, by Dr. W. R. Scott, of supposed hybrids between this species and the Red-legged Partridge, many of which were obtained in the West of Devon between 1859 and 1863. The plumage of these birds differed from that of ordinary individuals by being of a darker and richer brown, uniformly spread over the whole body, in having no grey markings, and in the entire absence of the horse-shoe on the breast. They had also a black patch on each cheek extending backwards, with a tendency to form a gorget across the throat. Some had white feathers on the breast. These were the birds we have already mentioned above.

The variety *ferrugineus*, Gould, has occurred on several occasions near Tavistock and Plymouth (Zool. 1861, p. 7544).

Col. Montagu mentions four pure white birds which were taken from one covey at Powderham. Several white or cream-coloured specimens

have occurred near Kingsbridge (R. P. N., Zool. 1875, p. 4696). In 1877, Mr. Webber, auctioneer, Silverton, showed us in the flesh a buff variety. One perfectly white was shot at Dracombe Farm, near Drewsteignton, Sept. 12, 1881. A specimen with white quill-feathers occurred at Plymouth, Oct. 27th, 1886 (J. G., Zool. 1887, p. 377). On Oct. 14th, 1886, Mr. E. A. S. Elliot obtained a young female with white "horse-shoe" on breast. Old females are frequently thus marked in the Kingsbridge district.

It is singular that the further north one goes the smaller becomes the Partridge, whereas with the Red Game the reverse is noted, the Red Grouse of Yorkshire being less in size than the average tenants of the Highland Moors.

Both Partridges and Red Grouse have from time to time been turned down on Lundy Island, only to be devoured by the rats. On Skomer Island, a very similar island to Lundy, and no very great distance from it, there is an excellent head of Partridges, owing, no doubt, to the absence of these vermin. On the Scilly Isles Partridges have occasionally been introduced, but soon disappear.

It is well known how courageous the Partridge is in the nesting-season, and in the defence of her young brood. We have seen a hen Partridge sitting on her nest on a railway embankment within a foot or so of the metals, and remaining undisturbed when the frequent trains rattled by. Once, when driving in a lane, we came suddenly on a Partridge with her lately-hatched chicks in the middle of the road; while these scuttled into the herbage by the side of the hedge, their devoted parent confronted and flew at our pony, and followed us some few yards in a most defiant manner.

We were one day sailing on the Torridge, a short distance above Instow, when a covey of Partridges suddenly flew off the land, and settled on the water in front of our boat. The tide was high, and we were quite two hundred yards from the shore. We actually bagged one of the birds while it was floating on the water, as we had a gun, being after Duck at the time. After our shot, the rest of the birds rose from the water and returned to the land. We felt pretty certain that a Hawk had startled the covey, and had occasioned this precipitate rush towards the river.

The Red-legged Partridge is said occasionally to perch on trees, but it is quite foreign to the habits of the Grey Partridge to do so. One day, however, when we were shooting on a precipitous hillside at Lec, near Ilfracombe, we saw a Partridge, one of a covey we had flushed, fly into an oak and perch on one of the boughs, whence it was put out and shot.

A wet summer, when there are numerous thunderstorms throughout June, is fatal to the young broods, which are either drowned or perish from cramp occasioned by roosting and moving about in the wet herbage. The manors will then be sadly bare of coveys when September arrives. But it is wonderful how rapidly the stock recovers. Let there be a couple of favourable hatching seasons, with warm sunshine, and the stubbles will once more abound with this favourite bird. The most sought-for food of the Partridge, from which in wet and cheerless summers it is

almost cut off, is the grasshopper, and of this insect it consumes great numbers, and, according to Col. Montagu, finds in them a valuable physic and tonic. Other insects, ants, and ants' eggs in particular, the seeds of various weeds and grasses, and grain, with the tender tops of various plants, form its food. In the autumn the turnip-fields are its accustomed resort; the high leaves afford it shelter and concealment, and beneath them it picks up small beetles and insects in abundance. But in moorland districts it is not often that the coveys are found among the turnips, the birds preferring the rough grass and rushes of the moory fields and the cover of the furze, and in these places they lie better throughout the season; and long after it has been quite useless to attempt to approach them in the remaining turnips on better cultivated lands, we have had excellent sport in such places on the hills, making good bags quite up to the end of January.

Early in the month one September we had the good fortune to account for a whole covey of thirteen birds, in a small turnip-field in North Devon. We were shooting over a magnificent young setter, only eleven months old, so that it was his first season with the gun. He made a point directly we entered the field, which was about five acres in extent, and we dropped a brace. The remaining birds then scattered all over the field, and this clever young dog, admirably broken to drop to shot, to wing, and, at a sign, to draw on and to stand dead or crippled birds, made them in the steadiest fashion, one after the other, and we got them all, the last bird being the old cock of the covey seen by us, as the dog was standing him, squatting beneath a turnip-leaf. He rose and did all he could in the way of rapid flight, skimming low above the ground, but only to fall, and to be in his turn drawn on and pointed as he lay dead upon the ground, the last of his family, by this matchless dog, pure white all over, without a single spot upon him, of the Laverack breed. We have possessed many a clever dog, both before and since, but this was the best performance we ever witnessed.

After October Partridges acquire a musty hay-like flavour, from feeding, we think, on the seeds of certain grasses, and are comparatively worthless for the spit.

Quail. *Coturnix communis*, Bonnat.

A summer migrant, of irregular appearance, sometimes remaining throughout the winter, but most frequently obtained in autumn. It annually resorts to Lundy Island during the periods of migration, and in 1870 Mr. Heaven knew of thirteen or fourteen nests there. In the following autumn and winter Quail were unusually numerous throughout the county (Zool. 1871, p. 2521).

A season seldom passes without a few Quail being noticed in the S.W. of England, or without one or two being procured in the winter months, and at irregular intervals a "Quail Year" comes round, when a larger migration to this country takes place in the spring, and nests are then

numerous, and in the following shooting-season many a bevy is encountered by the sportsman. Such a "Quail Year" occurred in 1870, when we knew of six nests having been detected in two adjoining fields on a farm near Bridgwater. One of these nests was unfortunately cut out, being placed among clover, and we were shown the eggs. In this same year Mr. Rodd states that Quail were plentiful in Cornwall.

"In 1846 a Quail, on a nest with nine eggs, was killed by a scythe in a field of Mr. C. Prideaux's at Dodbrook. Polwhele has seen the eggs also in the parish of Sherford" (E. M., Rowe's *Peramb. Dartmoor*, p. 231). Mr. Henry Nicholls, of Kingsbridge, purchased the above-mentioned Quail and nest, mounting the bird as a memorial. "Quails have bred in Devonshire near Crediton [and] in a cornfield on Staddon Heights, where the eggs were taken on August 1st, 1850" (Morris, *B. Birds*, iii. p. 385). A young one was caught by a boy near the Plymouth Cemetery in the autumn of 1862 (J. B. R., *Trans. Plym. Inst.* 1862-3, p. 68). A pair are said to have bred on Stoke Hill, near Exeter, about 1860.

Quail have been met with in midwinter on numerous occasions. Dr. E. Moore mentions having purchased one in Plymouth Market in January 1830, and two were obtained in Devonport Market in January 1831, one of them, a male bird, having the black crescent on the throat (*Mag. Nat. Hist.* 1837). One occurred at Dawlish in January 1857; and one was seen in the garden at Newport, near Topsham, January 27th, 1864, by Lieut.-Gen. D'Urban, who was well acquainted with this bird. One was shot by Mr. Walter Rogers at Halberton, December 3rd, 1870: this was a very large specimen of a female, and is now in the A. M. M. Some of these birds occurred at Plymouth in November 1852, November 1853, October 1856, September 1860, and October 1861 (B., *MS. Notes*). One, August 23rd, 1885; and a male was observed in a poulterer's shop at Devonport, Sept. 5th, 1886 (*J. G., Zool.* 1885, p. 378, 1887, p. 377). One was shot at Lifton on the Tamar, four miles from Launceston, September 1870 (*Zool.* 1871, p. 2521).

The Quail occurs almost every season near Kingsbridge, two or three specimens being sometimes obtained (R. P. N., *MS. Notes*). Mr. E. A. S. Elliot saw five or six on Burrough Farm, near Kingsbridge, October 17th, 1885, evidently migrating with a N.E. wind. One was shot at Dartmouth by Mr. N. P. Oldreive in October 1891.

Three were obtained in the neighbourhood of Torquay at the following dates: September 17th, October 19th, and November 3rd, 1870 (*J. H. G., Zool.* 1871, 2484).

"Found occasionally in the neighbourhood of Ashburton" (T. & K.). Several were shot at Cheriton Fitzpaine at the end of September 1854. One at Stoke Canon, near Exeter, November 1869; and one at Whitstone, near Exeter, September 6th, 1871 (R. C.). One near Axminster, October 29th, 1883 ('Field' for November 10th, 1883). Some heard calling near Barnstaple on June 18th, 1868 ("Phoenix" in 'Field'). Large numbers have frequently been brought alive to Exeter from the Continent, and some have been known to escape from the poulterers' shops.

In North Devon, the "Great Field" at Braunton, a large allotment-ground, was a favourite resort of Quail, and we have known of many having been shot there from time to time during the shooting-season. We have heard of others having been shot at various places throughout the northern part of the county, and have ourselves been present in North Devon when several Quail, rising in company with Partridges, have been mistaken for "squeakers," and allowed to fly off unshot at.

Lundy Island was once annually visited by Quail, and good bags have been obtained in September, but some years have now passed since any bred there.

Dr. Bullmore states that the Quail is not rare in the neighbourhood of

Falmouth, and says a bevy of sixteen were reared on Mr. Medlyn's estate at Lower Spargoe a few years since.

The Quail has been compared to a miniature Partridge, but it differs from that bird in being sometimes polygamous. The male has a shrill, whistling call-note, which is repeated three times in quick succession, hence the specific name "*dactylisonans*" given it by Meyer. This note we have frequently heard in the spring and early summer when walking about Bishop's Lydeard, in West Somerset. In a road passing through that village a dead Quail was picked up in December, and it is not rare to meet with examples of the Quail in the winter months. Such birds were believed by Col. Montagu to belong to a late brood. Nests with eggs have been occasionally found at the end of August, and the young birds which would be produced from them could not be ready to depart with the migrating birds at the end of September. Most of those obtained in winter are in poor condition, and instances are not rare of single birds being at that season found lying dead in the fields. In severe weather, when snow is on the ground, Quail must be much pressed to find sufficient sustenance; they then appear to cuddle together in the snow, keeping in the same spot for days together, making no search for food.

We drove with a friend one day in late autumn to a farm on the coast, near Bridgwater, where, in the course of a short afternoon, we secured seven varieties of game: *Partridge*, *Pheasant*, *Quail*, *Land-Rail*, *Snipe*, *Hare*, and *Rabbit*; and if we could have had an hour longer to have gone down to a small marsh, we should have probably added Teal and Wild Duck to our bag.

The Quail is, with justice, regarded by the *gourmet* as the most delicious of all the birds upon the game-list.

Family TETRAONIDÆ.

[Red Grouse. *Lagopus scoticus* (Lath.).

"A single specimen of this bird was shot on Dartmoor in October a few years since by Mr. Newton, in whose collection it remains. I am also informed by Mr. C. Prideaux, of Dodbrook, that a female of the same species was shot near Stokenham a few years since by Mr. Case (on the estate named France), in whose possession it now is" (E. M., Rowe's *Peramb. Dartmoor*, 1st ed. 1848, p. 231).

Ptarmigan. *Lagopus mutus* (Montin).

"A single specimen of this bird, *in summer plumage* (!), was also shot on Dartmoor in *October* by Mr. Newton, who still has it in his museum" (E. M., Rowe's *Peramb. Dartmoor*, 1st ed. 1848, p. 231).

If no mistake was made, it is not a little remarkable that Mr. Newton,

of Millaton, near Bridestow, who is credited with so many other rare birds, should have shot single specimens of both the Red Grouse and Ptarmigan, and both in the month of October. As the Red Grouse has occurred on the Mendip in Somerset, and also in Wilts (Zool. 1885, pp. 66, 147), it is possible that the specimens above mentioned may have made their way from South Wales across the Bristol Channel to Exmoor, and from thence to Dartmoor and the South Hams, perhaps driven from their usual haunts by severe weather or heavy snow. The Editor of the 'Zoologist' (1891, p. 235) states that about 1820-25 Mr. John Knight, of Simonsbath (the father of Sir Frederic Knight, formerly M.P. for Worcestershire), turned out several pairs of Red Grouse on Exmoor. He did not, however, succeed in establishing the species there. Possibly the specimens killed in Devonshire may have strayed from Exmoor. On the other hand, they may have been only young Blackgame, and not Red Grouse at all.

With regard to the Ptarmigan, it appears in the highest degree improbable that a bird which, in the British Islands, is found only on some of the highest mountains in Scotland, should occur in this county, and the above record is probably based on some error.]

Black Grouse. *Tetrao tetrix*, Linn.

[Moor Blackbird, Heath Poul: *Dev.*]

Resident. At the beginning of the present century this fine bird was abundant on most of the moors of the county. Some still exist on Dartmoor, on the Haldon and Blackdown Hills, on the high ground in the extreme eastern corner of the county, and on the moorlands in the north. A few are shot yearly on the southern and western parts of Dartmoor. There are also a few scattered birds on the eastern side, but they are extremely shy and very difficult to approach.

"Some few still remain on Dartmoor, where they breed in the turf tyes. All attempts to preserve this beautiful bird are unsuccessful, the great extent of the moor, while it is under the sole protection of a few individuals, renders it impossible to defend them from the depredations of the miners and turf-cutters who frequent the moor" (T. J., Bray's 'Tamar and Tavy,' 1st ed. 1836, i. p. 351).

The Blackcock is still a familiar bird on many of the moorlands throughout Devonshire, his presence in the county being testified by the "Heath Poul" Inns, one of them, on the road between Bampton and South Molton, being a favourite fixture for the hounds. Throughout North Devon, on almost all the moory hills, a few Blackgame may be encountered, and they become numerous as the skirts of Exmoor are approached. Between Barnstaple and the Forest they are to be found at Bratton, Bray, Charles, North Molton, Parracombe, and in the neighbourhood of Lynmouth; also between Barnstaple and Ilfracombe, where we have met with them in the parish of Bittadon, and one year knew of a

brood at Hartnoll. A few years since there were a brace or two on Coddon Hill, close to Barnstaple.

We have occasionally flushed and shot Blackcocks in turnip-fields on high ground in the centre of the county, as at Burrington, near Ashreigny. On Dartmoor we saw some every season, meeting occasionally with small packs late in the autumn, and frequently with single old cocks, but they were always wild. One summer we knew of a brood close to Cranmere Pool.

A stray bird, usually a Greyhen, is now and then shot in the Kingsbridge district (R. P. N.). A pack of eleven was seen by the late Mr. Bower Scott on Haldon in February 1882. In East Devon there are Blackgame near Hemyock, on the Blackdown Hills, between Honiton and Taunton, and also between Honiton and Uffculme. There used to be packs of Blackgame on Trinity Hill, near Axminster, in the first quarter of the present century (G. P. R. P., 'Book of the Axe'). A few breed on the high ground between Axminster and Lyme Regis (Beverly R. Morris, Zool. 1848, p. 2352).

In Cornwall there are a few on the Bodmin Moors around the Jamaica Inn, whence Mr. Rodd received hybrids between the Blackcock and the Pheasant. Blackgame are found throughout Somerset. On the estates of Sir Thomas Acland at Winsford, &c., they are numerous, and also on Mr. Snow's property at Oare, where we have heard of very good bags having been made. When fishing the beautiful Barle through the woods above Dulverton, we have once or twice seen Greyhens sitting on their nests within a few yards of the stream. These fine covers abound with the whortleberry, whose berries are eagerly sought after and devoured by Blackgame.

On the Quantocks there are a few Blackgame, and although they are strictly preserved and sparingly shot, they do not increase. There are some on the Blagdon Hills, and to the east of the county there are a few on the northern skirts of the Mendip country. In Dorsetshire Blackgame are extremely local, and do not multiply, and Mr. Mansel-Pleydell states there are only a few districts which suit their habits.

We have several times had the good fortune to witness the curious dancing parties or *leks* in which the Blackcocks indulge in the spring for the purpose of showing themselves off to the Greyhens. Late one evening in May we were driving over Winsford Hill on our return from a day's fishing at Withypool, when on a small square patch of turf by the side of the road, some way in front of us, we became aware of some black objects symmetrically arranged in rows, and looking to us like large ninepins set up for a game. As we approached we discovered them to be Blackcocks engaged in dancing. Two were so busily performing as we passed that they took no notice of us, although we could have well-nigh reached them with our whip. The birds, closely confronting each other, resembled two young cockerels about to commence a fight, but they did not strike any blows, merely bowing and scraping and jumping about, with trailing wings and outspread tails, while other Blackcocks looked on, and the ladies of the harem we considered to be watching from their "boxes" in

the adjacent heather. Indeed, we saw the head and neck of one raised from out a tump as we drove slowly by, greatly diverted by the scene.

At the end of August and in the beginning of September the young birds are extremely tame and foolish, although fully grown. We have seen a whole brood permit themselves to be taken up by the hand, one after another, when the setters have been standing them in the heather. Blackgame are also very fond of getting into standing corn, where they will also lie very close. The old Blackcocks are always shy and wary, and keep apart by themselves, sometimes flying up into a thick-foliaged tree, where they are perfectly concealed, and whence it is difficult to dislodge them. Later in the season the birds pack and are so wild as to be unapproachable except by stalking them, or by getting shots at them in the covers.

Hybrids between the Black Grouse and the Pheasant have been obtained near Plymouth and Tavistock (E. M., Mag. Nat. Hist. 1837). Bellamy mentions three instances (Nat. Hist. S. Devon, p. 209, note). The Rev. W. S. Hore had two handsome hybrids between the cock Pheasant and Greyhen, which were purchased in the market at Devonport at different dates (W. S. H. *in litt.*, and Zool. 1861, p. 7545; *cf.* Yarrell's B. Birds, 4th ed. pp. 69-72). Mr. J. Gatcombe also obtained one October 29th, 1878, in Plymouth Market, and another, a young male, in the same place in October 1883 (Zool. 1879, p. 60, 1884, p. 54).

Order FULICARIÆ.

Family RALLIDÆ.

THE RAILS.

The family of the Rails which, we are told, take their name from the harshness of their notes, from the old Dutch *rallen*, short for *ratelen*, to rattle, includes some very familiar birds, such as the Land-Rail, Moor-hen, and Coot—the two last resident throughout the year, and to be seen on every pond and lake, and by every river and stream, where there is sufficient cover of sedge, rush, or bramble to afford them shelter and concealment; while the first is a common spring migrant, whose harsh cry sounds from the meadows nearly all day and night in the early summer, and must have been heard by everyone who

lives in the country. Besides these there is the Water-Rail, which is partially resident, but does not often show itself, and is therefore less generally known than the Moor-hen. All the Rails are difficult to dislodge from their hiding-places among the thick aquatic herbage, preferring to run, or dive, or skulk, rather than take wing; and, as Mr. Stevenson well observes, in his 'Birds of Norfolk,' if this is to be said of the larger and more numerous members of the family, we can well understand how much more it applies to those minute Rails, such as the Spotted Crake, Baillon's Crake, and the Little Crake, all migrants in spring and again in autumn to this country, some of them occasionally residing with us throughout the year, which are very seldom detected, and yet may be more numerous than they are supposed to be. With their shy and retiring habits, with the abundant facilities for concealment provided by the lush aquatic herbage, and with numerous rat-holes close at hand into which to pop and lie *perdu* when the spaniel presses hard upon them, it is no wonder that these smaller species are so seldom obtained, and that some of them should continue to be regarded as among our rarest birds. The bodies of the Rails are admirably adapted for the purpose of running through the reeds and sedge, and for squeezing into the smallest chinks when necessary, as they are narrow and compressed; their legs are somewhat long, and are provided with elongated prehensile feet and claws, enabling them to climb and grasp the stems of aquatic plants, or to walk on the surface of the leaves which float upon the water. They are all expert and graceful swimmers, jerking their tails with every motion as they advance. They feed on aquatic snails, on insects, worms, slugs, small frogs, and various plants.

Water-Rail. *Rallus aquaticus*, Linn.

[Skiddy Cooek, Skit-y-coeck, Skip Cooek, Skitty Cooek, Grey Skit, Gutter Cooek, Ore Cooek : *Dev.*]

Resident, and common in some parts of the county, and, it is said, breeds in the neighbourhood of Dartmoor, and occasionally at Slapton Ley, but it is most frequently seen at the end of September and beginning of October. All that we have met with ourselves near Exeter occurred in the autumn and winter, at which seasons there is certainly an immigration from other places (W. D'U.). It breeds on Lundy Island (Trans. Devon. Assoc. viii. p. 307). Individuals are frequently chopped by sporting dogs in thick sedges and reeds, amongst which they become entangled when closely pursued. They seem to offer an irresistible temptation to the canine palate, no amount of punishment deterring a dog from eating them. Mr. E. A. S. Elliot notices a great variation in size independent of sex.

The Water-Rail, or Skitty Cooek, as it is commonly called, is a common resident in North Devon, to be met with in almost every warm ditch, where there is sufficient cover of tangled brambles, in sedgy dikes in the marshes, in swampy bottoms of woods, and by the sides of streams, where they are bordered with patches of furze, bramble, or other cover. The bird skulks in the shelter such places afford, is rarely seen at any distance from them in the open, and is not easy to flush, even with a good dog. When pressed by a spaniel we have seen it climb up and perch upon a bough, as a Moor-hen often does. We still possess eggs taken out of a nest which was placed in a hedge by the side of a drain, near our house in North Devon. When we resided in Wales, we had some Water-Rails about our grounds which were semi-domesticated, and used to feed on the lawn in front of our dining-room window, in company with the Moor-hens. They were occasionally noticed running on the garden paths at dusk, when they looked like large rats. In severe frosts these Rails may be observed in the daytime feeding by the margin of warm drains, running into the hedge, and effectually concealing themselves in an instant, when any one approaches; and after a continuance of hard weather strings of Water-Rails may be found hanging up in the game-dealers' shops, proving that the bird is more numerous than it is generally supposed to be. Frozen out from their sanctuaries and half-starved, they then become the spoil of every hedge-popper. The flesh of the Water-Rail is very sweet and toothsome, but there is so little of it that we have never considered it worth while to lift our gun against the bird for the sake of the spit. Although so common a bird, its shy and retiring habits prevent it from being generally known, so that we are often having specimens brought to us as something very rare, and we once found one hanging up in the bar of an hotel, waiting for some one to say what it was, and were told that it had been there already for several days, and no one could name it, although there was a moor at the back of the hotel, intersected by sedgy drains, where Water-Rails were plentiful.

Spotted Crake. *Porzana maruetta* (Leach).

[Silver Rail (on the Exe), Spotted Skitty (*N.D.*).]

A passing visitor in spring and autumn, being usually met with at the latter season, *i. e.* from August to the middle of November, very rarely remaining until December. Montagu speaks of its occurrence in spring, but there is no recorded instance since his time in South Devon; on the Branton Burrows it has been shot in February and March, and in our own collection we have a pair which were shot near Sidmouth in June (M. A. M.).

The Spotted Crake used to be not uncommon on the Exe in the reed-beds near Topsham, where it was well known to the gunners as the "Silver Rail," and the late Mr. F. W. L. Ross records having had six freshly-killed specimens at one time in September 1839 (MS. Journ. ii. p. 112).

This pretty Crake is to be met with occasionally in suitable places in North Devon during the autumn and winter. In September we have flushed it in clover-fields on high ground when Partridge-shooting. We have seen it on Branton Marsh and on the Branton Burrows during the winter when Snipe-shooting, and have found it in those places in March.

In Cornwall Mr. Rodd speaks of the Spotted Crake as chiefly occurring to Snipe-shooters during the winter. In Dorset, according to Mr. Mansel-Pleydell, it is rarely seen, and only as a migrant in the spring and autumn. From our own experience in Somerset the Spotted Crake is a common bird in that county in many places, and we consider it to be a resident there throughout the year. In the neighbourhood of Weston-super-Mare we used to find young broods in sedgy ponds and ditches on the level in July and August. We possessed a very clever setter at the time, who caught the birds in the cover and brought them to our hand. Only when they were very hard pressed did they ever take wing, and, standing on the higher ground above the drain, we have watched them threading their way through the sedge and rushes, running before our dog like rats, and have had them run out from the drain and squat in a little tuft of grass at our feet. Not wanting specimens, and knowing them to be rank of flesh and unfit for the table, we did not molest them; but we have in earlier years fired at them and shot them when Snipe-shooting near Taunton at the end of November, and when we were Sniping on the peat-moors in Mid-Somerset we never went there at any time in the winter without finding the Spotted Crake plentiful. On these moors the bird is well known to the local shooters, the men who are always prowling after Snipe and Duck to sell to the game-shops, as the "Jackymo;" and as our dear old setter used always to drop when he was close to his bird, we have walked up to him sometimes to find a "Jackymo" sitting on the ground quite unconcernedly between his outstretched fore legs. We have never wandered over the Somerset peat-moors in May and June, but had we done so with our clever dog we feel

confident we should have come across nests and eggs of the Spotted Crake. On the Dartmoor bogs we have never flushed any of these Crakes, the country being too high and exposed for them.

Montagu says, "We have obtained this species as early as 14th of March, and as late in the year as 23rd October, in Devonshire, but never in the winter months" (Orn. Dict., Suppl.). Dr. E. Moore states it was "rather scarce, mostly obtained in autumn. We have five or six specimens" (Mag. Nat. Hist. 1837). The Rev. R. A. Julian terms it "very rare; is occasionally seen in the months of September and October in Efford Marsh, where one specimen was obtained. The Rev. C. Bulteel also has a specimen in his collection which he shot near Ermington" ('Naturalist,' 1851, p. 87). One was killed at Plymouth, November 10th, 1855, and others seen (J. G., Zool. 1856, p. 4946). One at Brideslow, October 1st, 1862, and at Plymouth, November 1st, 1862 (B., MS. Notes). One was found dead on the railway near Tavistock, October 1863; one, October 13th, 1873, near Plymouth (J. G., Zool. 1863, p. 8832; 1873, p. 3786). One was obtained from Plymouth Market, December 15th, 1884 (R. P. N., Zool. 1885, p. 69). Several have been shot in the Kingsbridge district. A male at Kingsbridge, November 3rd, 1875 (R. P. N., Zool. 1875, p. 4763). One at Thurleston Ley, September 21st, 1878 (E. A. S. E., MS. Notes).

Other places where the Spotted Crake has occurred are Dartington (T. & K.) and the marshes near Newton (E. P., Trans. Devon. Assoc. viii. p. 289).

This Crake has frequently been obtained on the Exe, where we saw specimens on 5th October, 1853, and 20th September, 1854, and shot one September 17th, 1855 (W. D'U., Zool. 1855, p. 4895). One was shot close to the Railway Station at Exmouth in October 1890 (Seaward). One was seen November 19th, 1873, on the north coast of Devon (M. A. M., Zool. 1874, p. 3826). Two in Braunton Marshes, September 1874, and it was thought to be numerous there (G. F. M., Zool. 1874, p. 4253). Frequently flushed in clover-fields in September, and on Braunton Burrows in December, January, and February (M. A. M., Zool. 1890, p. 94). It is an occasional visitor to Lundy Island (Trans. Devon. Assoc. viii. p. 309).

[Baillon's Crake. *Porzana bailloni* (Vieill.).

There is no properly authenticated occurrence of this Crake in Devon. All that have yet been recorded proved to belong to the next species.

We have never handled a Devonshire specimen of Baillon's Crake. The one recorded by us as having been shot on the Braunton Burrows on February 4th, 1876, proved to be an adult male *Little Crake*. These minute Crakes are almost impossible to flush, and rather than take wing will run and conceal themselves in any convenient rat-hole, until the danger threatening them has passed. We believe them to be more numerous in England than is supposed; the majority of instances of their occurrence are due to *cats* which have caught and brought them into houses, and we consider that they sometimes nest and escape detection in the thick aquatic herbage in quiet places. At the time Mr. Cecil Smith wrote his book, he only knew of the Somersetshire specimen which had been recorded by Mr. Yarrell ('British Birds,' 1st ed. vol. iii. p. 21), an adult female which was shot in September, 1840, near Weston-super-Mare, but he became possessed subsequently of two specimens which were obtained by the side of the Tone close to Taunton. We saw both of these birds in the flesh, and were satisfied that they were birds of the year. The dates when they were procured were in the first week of October, 1870, and 29th September, 1875.

Mr. Rodd knew of four instances of the occurrence of Baillon's Crake in Cornwall; one of them, which was sent to Mr. Vingoe, at Penzance, for preservation in July 1858, was an adult male. We can consider the absence of this small species of Crake from the Devon list as only due to the extreme difficulty of flushing and securing it, and think it possible it may have been obtained occasionally without being identified, as there seems no reason why it should not visit the county. It is not mentioned in Mr. Mansel-Pleydell's 'Birds of Dorsetshire.'

Baillon's Crake has been detected nesting in Cambridgeshire and Norfolk. In the summer-time this small species appears to be widely distributed over the south of Europe.]

Little Crake. *Porzana parva* (Scop.).

A casual visitor, chiefly during the autumn and winter, and of rare occurrence in the spring and summer months. The first example of this species made known in Britain was shot near Ashburton in 1809, and Col. Montagu received it from Dr. Tucker of that place*. It is now in the gallery of British Birds at the South Kensington Natural History Museum. This specimen was figured and described in the supplement to the 'Ornithological Dictionary' under the name of 'Little Gallinule,' and appears to be a female, but the sex was not noted (Yarrell's B. Birds, 2nd ed. iii. p. 101).

Another was obtained by Drew in August 1831 (E. M., Mag. Nat. Hist. 1837); and under the name of 'Olivaceous Gallinule' Moore states that "one in the possession of Mr. Drew was discovered fluttering against a house in the town of Devonport, and was caught by some boys 13th May, 1829" (Trans. Plym. Inst. 1830, p. 332). He also mentions that "Mr. Newton shot this bird on the borders of a rivulet running through the lawn at Millaton" (Rowe's Peramb. Dartmoor, App. p. 234). A wounded bird was picked up by some boys in the Willow Plat on the western Backway at Kingsbridge, July 27th, 1855 (H. N., MS. Notes). One shot on Brauntou Burrows, February 4th, 1876, was recorded at the time as Baillon's Crake (M. A. M., Zool. 1876, p. 4815; 1891, p. 94). It seems probable that this species occasionally breeds in the county.

About the year 1850, Mr. Murray W. Mathew was accustomed frequently to shoot Snipe on Frogmore, which was then a tract of swampy moorland situated about seven miles to the north of Barnstaple on the Ilfracombe road, but has since been almost enclosed. He then possessed a very well broken "dropper," a cross between a setter and pointer, and this dog was extremely fond of hunting and catching Water-Rails, Jack Snipe, &c., and one winter caught alive three specimens of the Little Crake. Unfortunately, these birds were not properly preserved at the time, and perished; but years after we saw a portion of the skin of one of them, which proved a female Little Crake. Subsequently we ourselves almost trod on a Little Crake one day by the side of a rushy ditch on the

* William Markwick seems to have met with a Little Crake in March 1791 in Sussex, but failed to distinguish it from the Spotted Crake (Zool. 1890, pp. 344, 345).

Braunton Burrows, at the end of January; the bird, surprised by our sudden approach, rose on wing and flew down the ditch just above the water while we were waiting for it to get a sufficient distance away to shoot without destroying it as a specimen, but it disappointed us by dropping all at once and running into a hole, whence we were unable to procure it. Some time afterwards, when Snipe-shooting near the same spot with Mr. G. F. Mathew, we saw him shoot the adult male Little Crake mentioned in our account of the preceding species, as it ran across a patch of grass from one tump of rushes to the other. This was a very perfect specimen, which is still in our collection.

Mr. Rodd knew of but one Cornish specimen of the Little Crake, detected by Mr. Gatcombe on 21st March, 1878, in the shop of a bird-stuffer at Stonchouse, which had been captured *by a cat* a few days previously, at St. Dominick, in Cornwall. From Mr. Gatcombe's description this example was, evidently, an adult female. Mr. Mansel-Pleydell could only record two Dorsetshire Little Crakes, both shot at Alderholt Park, Fordingbridge, and does not give the date. Mr. Cecil Smith mentions no Somerset example; but we know of one, an adult male shot near Bridgewater, which was in the collection of Mr. Straddling, of Chilton Polden, and, with the rest of his birds, came subsequently into the possession of Mr. Henry Mathias, of Haverfordwest. Mr. Stevenson considered that the Little Crake bred occasionally in Norfolk. This species is a summer migrant to the south of Europe, nesting commonly in Italy, Spain, &c., and does not come far north.

Corn-Crake. *Crex pratensis*, Bechst.

[Land-Rail.]

A summer migrant, most frequently met with at the seasons of migration. Montagu states that it has been rarely known to breed in South Devon (Orn. Dict.). Mr. R. P. Nicholls finds it breeding in the Kingsbridge district, and it is noted as a "constant breeder" on Lundy Island (Trans. Devon. Assoc. 1876, viii, p. 300). Mr. J. R. Chanter, however, in his 'History of Lundy Island,' published in the Trans. Devon. Assoc. for 1871, makes no mention of its breeding there, though he includes it amongst the "summer visitants" to the island.

The Corn-Crake arrives at the end of April, or in the first week in May, and departs at the end of October, but a few are occasionally met with in the winter months. It is sometimes plentiful in autumn, congregating for a short time in fields near the sea-coast in September and October, and was formerly especially abundant on Lundy Island for a few days in September, during the autumnal migration. According to the Rev. H. G. Heaven, it is now rarely seen on the island (M. A. M., Zool. 1877, p. 388). It is far more seldom seen in spring and summer than in autumn in the south of the county.

The Rev. R. Holdsworth stated that he was present at the killing of as many as thirteen couple in a single day in September in South Devon

(Yarrell's B. Birds, 2nd ed. iii. p. 95). The Rev. R. A. Julian relates that in the month of October Land-Rails were found congregated by a farmer, residing near Modbury, in one of his potato-fields, not far from the sea-coast. He saw upwards of forty, and killed seventeen, and on going to try for them again the following day, he found they had all disappeared ('Naturalist,' 1851, p. 87). The late Mr. John Elliot, of Kingsbridge, states, in his annotated copy of Yarrell's 'British Birds,' that forty-two brace were shot by two guns in one morning, September 23rd, 1861, in the parish of Malborough.

This common and well-known bird varies considerably in numbers in the West Country; sometimes being very plentiful, so that its harsh "crake, crake" may be heard in almost every meadow and cornfield; while in other seasons it is comparatively scarce, and the summer may pass away with few being heard, and with only a chance one being met with in the clover-buds in September. In North Devon, especially in the moory hill farms, the Land-Rail is generally plentiful, and in such places three or four couple are picked up by the Partridge-shooter in the course of a day's tramp through the turnips, rough grass, and clover-fields. The nest and eggs of this Crake are frequently mown out in the haymaking season, and the bird will then lay again, and may sometimes rear a second brood, as we have caught with the hand in North Devon nestlings in mid-September, still in their black down. These late broods, no doubt, provide the Land-Rails which are occasionally shot during the winter months, and are to be seen hanging up in the game-dealers' shops in December; one in our collection was procured at Christmas-time. On Dartmoor we have found Land-Rails on the most elevated bogs, such as Raybarrow Mire, &c., in the autumn, sometimes encountering half a dozen in a morning's walk, when we have been after Snipe. We have seen a Land-Rail, when the setter has been drawing on it, take to the water, and swim gracefully across a stream, jerking its tail in the same way as the Common Moor-hen. One summer a Land-Rail brought her young brood into our kitchen-garden, which on one side was separated from a meadow by iron railings only. As we were walking on one of the paths, accompanied by a terrier, she suddenly darted out from the goose-berry-bushes, and furiously attacked the dog, pecking at him, and, flying up against him, fairly drove him away. When flushed in a clover-field the Land-Rail flies slowly and laboriously low over the ground, with drooping legs, and soon settles again in the cover, but we must not estimate the bird's power of wing from these, apparently, feeble efforts. We one day saw a bird dart like a Hawk over a stubble-field, seeming first to descend from a considerable height, and then settle on the ground, and going up, with much curiosity to ascertain what it was, were much surprised when it rose before us, and proved to be a Land-Rail. In the summer-time, when these noisy birds are calling incessantly in the mowing grass, we have, with a tooth-comb, succeeded in so closely imitating their cry that after a few moments we have drawn them close up to us, and standing quite still have had them running between our legs. At the time of their migration, at the end of September, we have

known Land-Rails appear in the streets of towns, and in the gardens and squares, especially of towns upon the coast. The flesh of the Land-Rail is deservedly held in high esteem, and we know of no more excellent pie than one composed *secundum artem* entirely of these birds.

Land-Rails are numerous in wet bogs on Dartmoor in autumn, and were remarkably so in August 1877 (M. A. M., Zool. 1877, p. 387). One of these birds occurred at Plymouth, June 3rd, 1855. They were plentiful in Plymouth Market in September 1873, and on September 11th, 1874 (J. G., Zool. 1874, pp. 3784, 4353). One was exposed for sale, December 18th, 1878 (Zool. 1879, p. 115). A young bird was killed by flying against the Eddystone Lighthouse, August 18th, 1883 (J. G., Zool. 1883, p. 422).

The Corn-Crake is common in the Kingsbridge district, its note being heard every summer in the grass-fields, and sometimes large numbers are met with in August and September (R. P. N., MS. Notes). It has occurred as late as December 26th near Kingsbridge (E. A. S. E., MS. Notes).

One was picked up dead, having been killed by flying against a telegraph-wire on the L. and S.W. Railway at Lion's Holt, Exeter, May 19th, 1879. A specimen of a dingy white colour was shot near Pinhoe, Exeter, May 3rd, 1881, and is now in the A. M. M. (W. D'U., Zool. 1881, p. 261). One was picked up dead on Southernhay, Exeter, May 7th, 1881. One near Exeter, November 1st, 1878. There were some for sale in Exeter in September and October 1879, September 1880, September and October 1883, and seven September 4th, 1884. One at Crediton, December 6th, 1881 ('Field' for December 10th, 1881).

[*Observations.*—Three species of the genus *Porphyrio* have been found at large in the United Kingdom, and require a brief notice. These are the Purple Gallinule (*Porphyrio porphyrio*); the Green-backed Gallinule (*Porphyrio chloronotus*, Vieill.); and the Martinique Gallinule (*Porphyrio martinicus*). The last, the smallest of the three, has only occurred once in England (in Hampshire, in August 1863), and being a native of Tropical America is the least likely to have reached our islands by itself, while many examples of the two other Purple Gallinules have now been recorded from various parts of the kingdom. Some of these handsome birds are occasionally imported alive into this country, and are kept on ornamental waters, from whence they have been known to escape. Too many specimens, however, have been obtained in unlooked-for parts of the country to be accounted for by "escapes," and the explanation we are disposed to give for the appearance of Purple Gallinules, and of many other South European and North African birds, which are so frequently being reported, is contained in two words, "assisted passage"; the birds having flown on board some homeward-bound vessel by which they were brought to our shores, sometimes as captives, and sometimes as voluntary passengers perched in the rigging. The beautiful Purple Gallinule, sometimes called the Purple Coot, which has occurred some half-dozen times, inhabits the marshes and the banks of rivers in the extreme south of Europe and the north of Africa. It is a larger bird than our Common Coot, and a very beautiful example was taken in Mid-Somerset some years ago, which created in us so great an interest that we took a journey expressly to see it. We found it at Tarnock, the residence of Mr. James Burrows, in the parish of Badgworth, who kindly allowed us to examine it, and gave us the particulars of its capture. The level pasture country

around his house is intersected by numerous ditches, many of them screened on either side by stiff blackthorn bushes, and it was in one of these ditches that his old sheep-dog, a very clever retriever, caught the bird alive, and brought it to him perfectly uninjured, on 25th August, 1875. He kept it alive for several days, when it died, presumably of starvation, and was then forwarded to a Bristol bird-stuffer, who set it up very cleverly. We could see no signs upon it of captivity; its plumage was perfect, none of the feathers being in the least abraded, and as there are no ornamental pieces of water anywhere within a great many miles where rare and valuable water-fowl are kept, we can only look upon this specimen as having reached our coast through "an assisted passage." Another of these beautiful Gallinules, also without any marks of ever having been in confinement, and in perfect plumage, which was shot many years ago in Ireland, is in our collection, and may have arrived on the Irish coast in a similar manner. It is singular that, as yet, none of these Purple Gallinules have been reported from the South Devon Leys, which might have been expected to attract any that had landed on the Cornish coast, and might be straggling on eastwards.

The Green-backed Gallinule differs from the Purple Gallinule only in having a green instead of a purple back, and is an African species, very rarely noticed on the northern side of the Mediterranean. Ten examples have now been recorded as having been met with at large in various places in the United Kingdom, and a live one was brought to Mr. Gatecombe, having been taken on board a ship, but in what latitude is not known, and was brought into Plymouth two or three years before 1886 (J. H. G. Jnr., Zool. 1886, p. 71).]

Moor-hen. *Gallinula chloropus* (Linn.).

[Water-hen.]

Resident, generally distributed and abundant on ponds, in ditches, in marshes, and in other suitable localities. Breeds.

The Moor-hen has increased in numbers to a marked extent in the valley of the Axe (G. P. R. P., 'Book of the Axe'). It is numerous in the ditches in the Exminster marshes, where there are often only a few inches of water at the bottom. When found by a dog on the bank of a ditch the bird plunges into the shallow water, and its course, as it moves along under the surface, can be distinctly traced, the air entangled in the plumage surrounding the bird like a large bubble or silvery envelope, and the bird is able to remain for some time under water. We have seen Moor-hens killed with stones when thus endeavouring to escape the pursuit of a dog, and it was a common practice for boys to hunt them in this manner. We fed our tame Falcons at one time almost entirely on Moor-hens, and caught several with a butterfly net, after having marked them into their hovers beneath a bank.

This common bird is to be met with frequently in a semi-domesticated

state. It is quite usual to see it feeding in farmyards together with the poultry, where there is a brook, or an old pond, bordered by the tangle of brambles, in which it loves to shelter close at hand, and we have found flour-mills to be greatly affected by it on account of the heaps of husks lying about, which it may be seen examining in company with fowls and pigeons. We had always a number of Water-hens about our grounds, feeding quite tamely on the lawn, and one summer counted seven nests around our ponds, which were bordered with clumps of rhododendron, affording the birds a quiet refuge. As soon as the young birds are able to cater for themselves, the old birds drive them off and they disappear. We have found our Moor-hens roosting on the lower branches of trees, and have occasionally seen a nest placed in the fork of a tree some little height above the water. We have heard anglers speak with impatience of the Water-hen, and say that the birds ought to be destroyed upon trout-streams, because of the manner they splash for some distance along the surface of the water when they are flushed, thus disturbing and frightening the fish; but we have never concurred in this sentiment, being at all times glad to come across them in their haunts.

A brood of Moor-hens is a pretty sight, the little black chicks closely attended by the two old birds, who are anxious and watchful parents, and gently pushing aside the branches screening some quiet pool we have looked through, and ourselves unseen have frequently enjoyed it. In very severe weather the Moor-hens suffer greatly, and numbers fall a prey to foxes, whose tracks may then be seen thick upon the snow at the edges of the brooks.

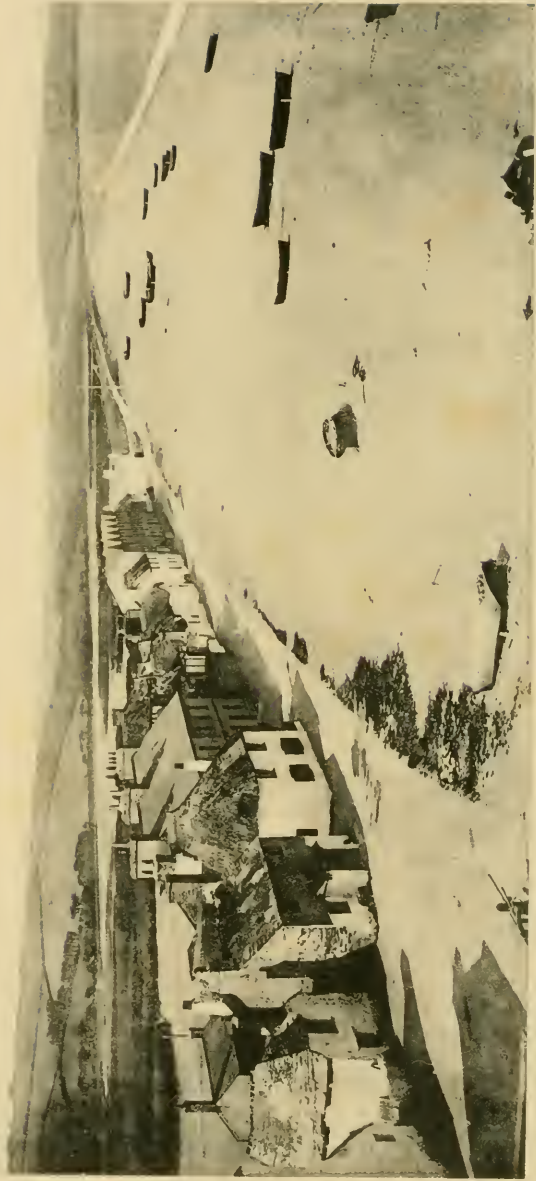
Coot. *Fulica atra*, Linn.

[Bald Coot.]

Resident, but now almost entirely confined to Slapton, Thurlestone, and Milton Leys, on the south-west coast of the county, and some other ornamental waters where it is preserved and breeds freely.

The late Mr. F. W. L. Ross informed us that he remembered seeing the water in the estuary of the Exe between Lympstone and Powderham "literally black with Coots." The introduction of punt-guns soon drove them away, and now only occasional stragglers visit the Exe in severe weather, when they have been frozen out of their usual haunts. Some occurred on the Exe near Topsham in December 1855, and some early in December 1890, near Exmouth. The Coot is rarely seen near Plymouth (B., MS. Notes), and seldom visits the Tamar (T. J., Bray's 'Tamar and Tavy,' 1836, i. p. 354). It was formerly found on the Teign and Dart, but was not so common as the Moor-hen (T. & K.).

The North Devon trout-streams are clear and rapid, without any broad fringes of sedge and rush; there are no large meres or leys, and the Coot, in consequence, is only known in that part of the county as a winter visitor, large flocks being sometimes seen in hard weather resting upon



TORCROSS AND SLAPTON LEY.

the mud-banks of the Barnstaple river. They are shy and restless, and not to be approached, and gunners after Wild Duck do not care to see them, as they keep all other birds watchful and disturbed. In very severe frosts our dogs have occasionally caught and brought to us a frozen-out Coot found sheltering in an orchard ditch, which is also a very favourite refuge for a Woodcock in similar weather.

At the far-famed Slapton Ley there used formerly to be an annual battue, or public shoot, in the month of January, and the "Ley Day," as it was called, was looked forward to with great delight by all the country-side. Many years ago we took part in one of these exciting events. A line of boats having been formed near the Sands Hotel, stretching all across the ley from side to side, a boatman and two gunners being in each boat, and each gunner being provided with a couple of double-barrelled guns, at a concerted signal the whole line moved forward, sweeping the Ley, and driving all the Coots, thickly covering the water, in front of them towards the Torcross end. As the end of the Ley was approached, the unfortunate Coots, being closely packed, and unable to go further, rose in one dense mass, churning up the water with their wings, and affording a spectacle long to be remembered by all who have been fortunate enough to witness the sight. After rising, the whole mass of birds swept back over the boats, being saluted with volleys from the gunners in the boats and from the usual crowd of loafers on the shores of the Ley, armed with long duck-guns and every available variety of firearm. The execution was great, and the water was soon covered with the dead and dying, and wounded cripples, many of which afforded exciting chases and gave rise to angry altercations between the rival gunners. Few birds besides Coots were killed, as the great flocks of other wild-fowl, which are generally to be seen on the Ley in winter, rose from the water at the first alarm and flew out to sea, a few being dropped as they passed over the heads of the people on the beach. For many years these public shoots were discontinued, but one day at the end of January 1891 Mr. Lucas, the lessee of the Stokeley Estate, allowed shore-shooting as usual, when his party in ten boats, with two gunners in each boat, some of whom had as many as four guns each (with two boats employed to pick up drifted birds), drove the Ley. On the first drive down from the Slapton end, nearly all the Wigeon, Ducks, &c. left before a shot was fired. Mr. Edmund A. S. Elliot, who kindly furnished us with these particulars, thinks there could not have been far short of a thousand birds in the flock as they rose and went off to sea. The shooting was soon fast and furious at the Coots, which seemed utterly unable to grasp the situation, after being left undisturbed for so many years, but they could bear thinning, as the water looked black with them in the early morning before the shooting began. As the result of this first drive before lunch, 669 Coots were gathered by the boats, and 22 "Wigeon" of sorts. After lunch the same tactics were gone through again, and the boats came in about 4 p.m. The Coots, when counted, came to 612, and there were 12 Wigeon, &c. Some fine Tufted Ducks, female Golden-eyes, Scaup, Pochards, Wigeon, Mallard and Teal were secured, and some male Golden-eyes and two male Snegs got

away to sea. Along the shore there was a great deal of shooting, and probably about 150 or 200 Coots were secured, some by those who shot them, but as often as not by the swarm of grabbers who waded out after birds fallen in the water, and many an amusing scene took place between irate gunners and some of these gentry. At least 100 birds were picked up by these same people on the western side of the Ley, where they had no business to be; and it was expected that from 100 to 150 birds would be retrieved next day amongst the reeds, as the boats had not time to gather them all. In all, Mr. Elliot calculated that there must have been killed and gathered 1700 Coots, and about 50 Ducks of different species, as the result of this day's shoots. We learn that, notwithstanding the slaughter on this occasion, the Coots are almost as numerous as ever on the Ley, and the thinning out of the old stock has improved the health of the survivors, as three years since great numbers died from epizootic disease. A large portion of the Coots at Slapton Ley are migratory, and those found there in winter are mostly "foreigners," which arrive from other parts in the autumn, and after severe weather their numbers always increase (W. V. T.).

Order ALECTORIDES.

Family GRUIDÆ.

THE CRANES.

Formerly ornithologists placed the Cranes among the Herons, but they differ from those birds, whose young are hatched nearly naked, in having their nestlings covered with down, and able to run about, when they leave the shell, thus coming nearer to the Bustards and Plovers. They also differ considerably in structure and in habits from the Herons, and their eggs, instead of being blue, like those of the Herons, are olive, as are those of the Bustards. Besides the Common Crane, which is now-a-days a very rare straggler to England, three other species of Crane, the Demoiselle Crane (*Grus virgo*), the Balearic Crane (*Balearica pavonina*), and the Siberian Crane (*Grus leucogeranus*), have been met with at large in the United Kingdom. An example of the Demoiselle Crane was reported in the 'Zoologist' (1876, p. 4928) as having been picked up dead on the banks of the river Cale, near Wincanton,

in Mid-Somerset, but the date is not given; and Mr. Cecil Smith, who subsequently investigated this story, discovered that it was all a mistake, the bird having been probably only a Common Heron! But an undoubted specimen was shot on May 14, 1863, near Deerness, Kirkwall, Orkney, and the Common Crane has occurred more frequently of late years in Orkney and Shetland than elsewhere in Great Britain. The Northern line taken by some of the Cranes on their migrations is not a little singular. The single instance of the Balearic Crane, a native of Northern and Western Africa, which occurred in the West of Scotland in Ayrshire was probably due to an "escape"; but, perhaps, can better be accounted for by "assisted passage." And then, in August 1891, an example of the Siberian Crane, a large white species whose habitat is Northern and Central Asia, was shot on Barra, in the Outer Hebrides. This bird is supposed to have escaped from a gentleman's garden at Marlow in Bucks.

Crane. *Grus communis*, Bechstein.

A casual visitor, of exceedingly rare occurrence.

We must go back at least three centuries to find a period when a few Cranes are reported to have nested on the great fen lands in the Eastern counties of England; the extensive drainage of marshes, especially of the Great Bedford Level, has long since so narrowed the area of any suitable habitat in this kingdom for this most wary bird that it long ago became what it is to-day, only a very rare occasional spring and winter visitor to any part of the United Kingdom. The fact that the Common Heron is so frequently called the Crane has been the root of a considerable amount of error with regard to the appearance of the real Crane in this country, and in Devonshire the name 'Cranmere' for a moorland tarn no longer existing has been a trap to some of the early ornithologists, who fancied it took its name from the *Crane*. But Cranmere has no connection either with the true Crane or with the true Heron, which in our experience seldom ascends to the more exposed and elevated bogs of Dartmoor, but simply means "the reservoir of waters," from two British words of that signification.

In Devonshire there is only the record of the fine Crane which we have admired in Mr. E. H. Rodd's collection, and of another which was observed, but not obtained, near the Start; but in Somerset three examples have

been procured of late years, two in the west, and one in the centre of the county. The first of these was an immature bird, shot by Mr. C. Haddon, of Taunton, in company with another gentleman, on 17th October, 1865, at a place called Ham Sea Wall, half a mile west of Stolford, near Bridgwater. This Crane was observed feeding in the centre of an extensive pasture in company with some bullocks, and by keeping behind one of these, and driving it gradually towards the bird, Mr. Haddon and his friend succeeded in stalking and shooting it. Another, a very fine adult, was shot a little distance from the same spot, at Country Sea Wall, one mile to the east of Stolford, by Mr. Richard Chilcott, of Bridgwater, on 5th Dec., 1889 (Zool. 1890, p. 75). This was a very fine specimen, and was beautifully set up by Mr. Bidgood, Curator of the Taunton Castle Museum, and is now in the possession of Sir Alexander Acland Hood, Bart., at St. Audries. The third Somerset Crane, also an adult, was shot in the parish of South Brent, and we extract the note we communicated to the 'Zoologist' respecting it (Zool. 1879, p. 128):—"Having heard a report that a farmer living in the flat had, not long since, shot a Crane, I called on him to gather what information he could give on the matter. The Great Western Railway runs through the Great Mid-Somerset level, and where it is crossed by lanes, these approach it by artificially constructed mounds supporting the bridges over the line, locally termed 'tips.' All the bridges, lanes, and tips are precisely alike, and it was with some difficulty, and not till after one or two blunders, that I at last obtained the 'correct tip,' which brought me to Wick Farm, in the parish of South Brent, the abode of Mr. William Harris, who was reported to have shot the Crane. Finding him at home, I received from him the following information:—One evening in May, 1875, just as it was getting dusk, he saw a large bird alight in a field near his house. He went home for his gun, and returning found the bird in the same place, and succeeded in getting near enough to shoot it. It was very different from what we call the Common Crane, he said (meaning the Common Heron), and was altogether a strange-looking bird. The top of its head was red, and the feathers of its tail were like those of a cock; and he proceeded to give me a very good description of an adult *Grus communis*. Asked what he had done with the bird, he replied that, not knowing it was of any value, he had given it to his labourers, and that, since then, some of his neighbours had very much blamed him for not having had the bird preserved."

A male was killed at Buckland Monachorum, on the borders of Dartmoor, in the autumn of 1826, and was preserved in Drew's collection at Plymouth (E. M., Trans. Plym. Inst. 1830; Rowe's Peramb. Dartmoor, 1848, p. 231). Mr. E. H. Rodd says of this bird:—"A solitary Crane which for some time frequented the banks of the river Tamar, which divides Cornwall from Devon, was, after several ineffectual attempts to secure it, at length shot on the Devonshire side of the river, near Buckland Monachorum, and is preserved in my collection. This was in the autumn of 1826, since which time I have not heard of the occurrence of any other example of this bird in either Devon or Cornwall" ('Birds of Cornwall,' p. 126). It is presumed that Mr. Rodd obtained his specimen from Mr. Drew; but in the collection of the late Mr. Marsh-Dunn, of Teignmouth, there is a Crane which was purchased at the sale of Mr. Bolitho,

of Plymouth, and was supposed to have been the one killed near Buckland Monachorum (M. Marsh-Dunn *in litt.* Aug. 21st, 1883). Mr. J. Gatcombe, however, states (*in litt.* Sept. 3rd, 1883) that there is no doubt that Mr. Rodd's specimen is the genuine one.

A Crane was seen for five or six days on the high level fields near the Start Light-house in September 1869 (H. N., Zool. 1869, p. 1866; and J. H. G., Zool. 1871, p. 2683). It was seen by Mr. Popplestone and others frequenting a large field on Start Farm, keeping near the centre of the field out of gunshot (H. N., MS. Notes). "Cranmere Pool, on Dartmoor, is supposed by some to be so named from the resort of Cranes there in ancient times" (E. M., Rowe's *Peramb. Dartmoor*, p. 231). But this we have already shown to be an error.

Mr. E. H. Rodd quotes Dr. Couch as his authority for one or two Cranes having been procured in Cornwall. In Dorsetshire, Mr. Mansel-Pleydell knew of three; the last of these was shot on the banks of the Wareham river in May 1869.

Vast flocks of Common Cranes pass northwards into Europe every year in March, returning south again in October, flying in the formation of an inverted Y very high in the air, uttering loud trumpet notes. They are found during the summer on all the extensive marshes of Northern and Central Europe, as high up as Norway and Lapland. Canon Tristram has recorded the numbers which pass over Palestine: "clouds of these enormous birds quite darkened the air towards evening" (*Nat. Hist. of Bible*, p. 240).

Family OTIDIDÆ.

THE BUSTARDS.

The Bustards unite the Alectorides or Cranes with the Limicolæ, or shore-frequenting birds, through the Stone-Curlew, Thick-knee, or Norfolk Plover, and the true Plovers. They are conspicuous for their rapid walking, and for the speed with which they run over the level plains and downs that are their usual haunts, seldom taking to wing even when pursued.

We have three species, all of them, at the present day, only occasional stragglers to this kingdom, although one of them, the Great Bustard, used formerly to be indigenous in some parts of the country, and was, perhaps, the noblest of our native birds. The increased cultivation of waste lands, together with the constant persecution of the birds and the destruction of their eggs, combined to remove them

from our native avifauna, and we now know them only as rare visitors from the Continent. The Little Bustard comes to us, at uncertain intervals, as a winter migrant, and one specimen of the Asiatic Macqueen's Bustard, one of the ruffed species of this handsome genus, has occurred in Lincolnshire.

Great Bustard. *Otis tarda*, Linn.

A casual visitor, of very rare occurrence in winter.

Even at the time when the Great Bustard was still an indigenous British bird it could never have been more than a rare accidental visitor to the S.W. of England, and was probably seen in Devonshire not more frequently than it is at the present day. Anyone who knows the habits of this grand bird would at once understand that our elevated Devonshire moorlands are quite unsuited to it. The Great Bustard was never an abundant bird in England, as is proved by its price in the reign of Queen Mary having been ten shillings. There were a few on the Wiltshire Downs and in the counties of Hants and Dorset, many more in the great strongholds of the birds to be found in Suffolk, Norfolk, and parts of Cambridgeshire, and a few also in Lincolnshire and on the Yorkshire Wolds. The appearance of Great Bustards in other parts of the country was only accidental. Col. Montagu considered that Bustards were not properly migratory, and that they only left their usual haunts when the weather was very severe and the ground covered with snow; they then would wander in search of food in small flocks (or 'droves,' as they were called in Norfolk) into cultivated grounds, occasionally moving off to some distance. He states that in the winter of 1798 one was killed near Plymouth; two others were obtained in Devonshire the following year, and in 1804 one brought into Plymouth Market was sold for a shilling to a publican: this bird was cooked for dinner for some "commercial," who, seeing that the flesh of the breast was of two colours, a peculiarity with some of our most highly prized game-birds, voted it unfit for food, and ordered it from the table. A fine Great Bustard was shot by a farm labourer in the parish of Bratton Clovelly, not far from the borders of Cornwall, on 31st Dec. 1851, and is in the possession of Mr. Newton, Millaton House, Bridestow, who kindly allowed us to see it. It is a very beautiful specimen of a male bird, and was acquired, so we were told, for five shillings. Towards the end of 1870 this country was visited by a small immigration of Great Bustards from the Continent, and specimens were procured in many districts. In North Devon a flock of seven or eight was observed in a field at Croyde, where two were shot. The survivors then flew a little distance to the south, alighting in a field on the boundary of the two parishes of West Down and Brainton, where Mr. Wells, of West Down, fired at them, and wounded one of them, which was afterwards secured. The flock, from which three had now

been taken, next settled close to the small town of Braunton, near some boys who were sliding on the ice, who at once began to pelt them with stones, upon which the birds flew off and were seen no more. Some Bustards reported to have been seen shortly afterwards at Holsworthy may probably have been the remains of the flock which appeared first at Croyde. Mr. Gatcombe was so interested in the occurrence of these Great Bustards in North Devon that he visited the neighbourhood where they had been met with in order to secure all the information he could, and wrote an account of what he had heard to the 'Zoologist' (1871, p. 2474). He states that the country people considered the birds to have been wild Turkeys, and gives an extract from the 'North Devon Journal':—"Wild Fowl. During Christmas week a flock of eight wild Turkeys alighted in a field at Croyde. They were seen by Mr. W. Quick, who followed and shot one, which weighed upwards of 9 lbs., and was much admired. The others soon took their flight to the west, and have not made a second appearance." At the Barnstaple Railway Station Mr. Gatcombe saw a man with some feathers in his hat, who pointed to one of them, and said, "This here, Sir, belonged to one of them Turkey Buzzards." Mr. James Rowe, gunsmith, of Barnstaple, succeeded, after some difficulty, in obtaining the two Bustards which had been shot at Croyde for preservation. Unfortunately, several feathers had been plucked from their tails and wings for the hats of the farmers' daughters; however, in spite of their mauling they made very good specimens, one of them being in our possession, while the other passed into the collection of Mr. Cecil Smith. Both of these birds were young females. It would appear that the bird wounded by Mr. Wells was subsequently obtained and eaten, as we heard from a gentleman who partook of it, and who spoke of the excellence of the meat.

In addition to the Devonshire Great Bustards already enumerated we can mention a fine female which was purchased many years ago at the sale of Mr. Comyns's collection at Starcross. Mr. Burt, the Curator of the Torquay Museum, considered that this specimen had been procured in the county.

In Cornwall, Dr. Bullmore states that a specimen of the Great Bustard was brought to him for identification in January 1854, which had been shot near St. Austell, and had been sent into Falmouth for preservation. To this Cornish example we can add from Mr. Rodd's list "one observed in March 1843 and afterwards captured, on the Goonhilly Downs, in the Lizard district; this proved to be a female, and is now preserved in a private collection at Penzance." A third Cornish Great Bustard was reported to the 'Zoologist' for 1880 (p. 25) by Mr. Gatcombe, who had received particulars of its capture from Mr. Stephen Clogg of Looe, near which place it had been caught by a spaniel, and was brought alive to Mr. Clogg for identification. This was on Dec. 11th, 1879. This bird was in a half-starved condition, and being badly injured by the dog, Mr. Clogg recommended that it should be killed. It was a female, and what became of it subsequently we are not told.

In the county of Dorset Mr. Mansel-Pleydell, at the time he wrote his book, knew of but one Great Bustard which had occurred in modern times,

a female, shot in a turnip-field on January 1st, 1880, at Handley, which was sent to Mr. Hart, of Christchurch, for preservation. But subsequently (Zool. 1888, p. 429) he was able to record another which in the summer of 1888 frequented the high land above Fontmell, near Shaftesbury, and went off unharmed. On the authority of Rev. J. H. Austen, Mr. More ('Ibis,' 1865, p. 429) added Dorset to the list of counties in which he had ascertained that the Great Bustard formerly nested.

Mr. Cecil Smith knew of no Somerset Great Bustard, but at the time there were Bustards on the Wiltshire Downs some of them must occasionally have visited the Mendip country, only a short flight to the west. On Sept. 22nd, 1870, Mr. J. E. Harting had the good luck to see a live Great Bustard on Shapwick peat-moor, as he was travelling on the Somerset and Dorset Railway between Highbridge and Wells. The bird was close to the line, and Mr. Harting had a clear view of it ('Field,' Jan. 14, 1871).

At the breeding-season adult male Great Bustards develop a singular gular pouch, which they inflate with air, and so distend the throat to an extraordinary size; this they do when showing themselves off to their admiring harem, with drooping wings, with their tail expanded and turned over their back in the manner of a Turkey Cock, and with all their feathers ruffled out.

The Great Bustard usually frequents plains, large corn-fields, turnip-fields, and downs, and, in this country, generally nested in fields of rye and wheat. The last date for an English nest was 1833, and the place Great Massingham Heath, in Norfolk. There are many memorials of the former existence of the Great Bustard as an indigenous bird, in Bustard Inns, Bustard Pools, &c. In the village of Martin, on the S.W. corner of Salisbury Plain, a pond still goes by the name of the Bustard Pool, and the tradition remains that the Bustards used to come to it to drink. Adult males are magnificent birds and attain a great weight. One we received from Seville sealed 28 lbs. in the meat.

Montagu says: "In the winter of 1798 one was killed near Plymouth in Devonshire, and two others the following year in the same county" (Orn. Dict.); and "one of this species shot in Devonshire in the year 1804, and taken to Plymouth Market, was bought by a publican for a shilling" (Orn. Dict., Suppl. 1813). One at Houndale, Dartmoor, 1799, Rev. S. Rowe (E. M., in Rowe's Peramb. Dartmoor, App. p. 233). This was probably one of those alluded to by Montagu. A specimen purchased at the sale of the Rev. Kerr Vaughan's collection by the late Mr. John Elliot of Tresillian, Kingsbridge, is said to have been bought in Plymouth Market early in the present century (E. A. S. E.). A Bustard was shot in the parish of Bratton Clovelly, on 31st Dec. 1851 (J. G., 'Naturalist,' 1852, p. 33). Two, both females, were shot and a third wounded out of a flock of seven or eight at Croyde and Braunton on Dec. 31st, 1870; some were seen soon after at Holsworthy (Zool. 1871, pp. 2474, 2475, 2510). Three Bustards, probably the survivors from this flock, were seen on Salisbury Plain at the end of January 1871, and two were shot (Zool. 1871, pp. 2477, 2510).

Little Bustard. *Otis tetrax*, Linn.

A casual visitor, of somewhat rare occurrence, during the autumn and winter months.

The Little Bustard is a common species in the south of Europe which occasionally visits this country in the winter-time, December being the month in which most specimens have been obtained, and turnip-fields the favourite localities. Hence, in some places, the bird bears the name of the "Turnip Duck." Examples of males, in the handsome adult plumage, have never been secured in the United Kingdom. At least ten Little Bustards, all females or immaturo birds, have been recorded from Devonshire; one of these, shot at Braunton, December 23rd, 1880, is in our collection.

A female was shot at Torrington, North Devon, in Dec. 1804, and was taken to Plymouth Market; and another, also a female, was seen by Montagu in Oct. 1810 in a turnip-field in Devonshire (Orn. Dict., Suppl.). One was shot on Creacombe Moor, near Exmoor, in 1820 (E. M., Mag. Nat. Hist. 1837, p. 319); and one near Bigbury (*id.* Rowe's Peramb. Dartmoor, App. p. 234); one at Ashburton (A. G. C. T.). Two females occurred near Kingsbridge between 1840 and 1847 (H. N., Zool. 1847, p. 1695). A female was shot by Lieut. Pearce, Feb. 5th, 1864, on the high open land adjoining the sea-coast adjacent to the Start Lighthouse (H. N., MS. Notes, and Zool. 1864, p. 9039). A female was killed in a turnip-field near North Tawton, Dec. 6th; and another female in the parish of Braunton, Dec. 23rd, 1880 (J. G., Zool. 1881, p. 53; G. F. M., p. 58). It is very remarkable that specimens of both the Great and Little Bustard should have been offered for sale in Plymouth Market in the same year (1804). Most, if not all, of the examples which have occurred in this county were females (or perhaps immature birds), but in the 'Synopsis of the Newcastle Museum,' by George Townshend Fox (1827), mention is made on the authority of Mr. Henry Mewburn, of St. Germans, Cornwall, of a *male* that "was bought in Plymouth Market, and dressed at one of the inns there as a pheasant for the travellers' table." Montagu (1813) gives a version of this story in connection with the Great Bustard killed in 1804, whilst of the Little Bustard killed in the same year he distinctly says it was a *female* and "was sold for a female Black Grouse."

In Cornwall Mr. Rodd reports a dozen Little Bustards, and remarks that several occurred in various parts of the kingdom in 1875, showing that a small immigration must have taken place. In the winter of 1853 several are stated by him to have been brought into the market at Penzance, and sold there as "Silver Pheasants"! After this rather extensive list from Devon and Cornwall, it is a little singular that we possess no knowledge of a single Somerset specimen, and in Dorsetshire Mr. Mansel-Pleydell knew of only one, which was in his own collection, and was shot Dec. 26th, 1853, on Fossil Common, Winfrith.

Order LIMICOLÆ.

Family ŒDICNEMIDÆ.

Stone-Curlew. *Œdicnemus scolopax* (S. G. Gmelin).

[Great Plover, Norfolk Plover, Common Thick-knee, Thick-kneed Bustard of Montagu.]

A casual visitor, of occasional occurrence, usually in the winter months, *i. e.* October to February, and mostly on the South coast. It has occurred only once in the month of March (1867) and once in May (1889). Mr. R. P. Nicholls had a specimen that was killed out of a flock in the winter of 1889, but this bird generally occurs either singly or in pairs in Devonshire.

The Stone-Curlew is a summer visitant in small numbers to some of our Southern and Eastern counties, arriving at the end of April and leaving again at Michaelmas, its presence being generally first announced by the shrill cry of the male being heard in the evenings. It has not been found in the summer months further west than Dorsetshire, in which county it still nests in several places towards its eastern borders. In West Somerset, Devon, and Cornwall it is only known as a winter visitor, that part of the kingdom being apparently the extreme north of the bird's winter range. In North Devon we have seen single examples of this bird flying overhead when we have been on the look-out for wild-fowl in severe weather during the winter months, and we have known it to have been shot on the Braunton Burrows in January. All the records of its occurrence in the county of which we have knowledge are given below.

The Stone-Curlew is at all times a shy and suspicious bird, and very difficult to approach. Not very many, in consequence, fall victims to the gun; but in spite of this the bird is decreasing each year in all its English haunts. This is due to the destruction of its eggs, which are very generally deposited in wheat-fields, and are smashed by the heavy iron rollers used for rolling the wheat. A great number of eggs are also devoured by Rooks, which are constantly on the look-out for them. We have known the Stone-Curlew to occur frequently on the Mendip, but have no knowledge of a nest there, although it is a very likely place for one, and is only a short flight from the Wiltshire Downs, where many breed; nor do we know of a nest ever having been detected in Somerset. In the east of that county we have met with Stone-Curlews singly in turnip-fields in August, and have occasionally seen little flocks of ten or a dozen passing overhead.

Like many of the Plovers, the Stone-Curlew will sometimes squat, trusting to the protective colour of its plumage, which closely resembles

that of the ground it mostly frequents, and will thus succeed in escaping notice; but it is sometimes betrayed by its bright eye. It is found in large corn-fields, heaths, and warrens, and later in the season in turnip-fields. Its two or three eggs are placed upon the ground, in no nest, on a spot where stones and grey flints are lying about, to which the eggs have a protective resemblance in their tints. We have been very familiar with the Stone-Curlew in the Wiltshire-Down country when Partridge-shooting in September. The bird, there called the "Gurt Curloo," is generally to be found in turnip-fields; but it is impossible to approach it, as there is always one on the watch as sentinel, which flies up with a shrill whistle on the first sign of danger, and then the others rise singly all over the field, and the flock of a dozen or more make off to some other feeding-ground.

Like the Plovers, the Stone-Curlew becomes noisy and restless at dusk, and feeds chiefly late in the evening, beetles and moths which then emerge forming a considerable portion of its *menu*; and should there be a moon, it will go on seeking for worms, slugs, snails, &c. until daylight.

The Stone-Curlew derives its name of "Thick-knee" from the swollen appearance of the upper end of the tarsus in the young birds.

Montagu mentions a female specimen killed near the Start Point at the beginning of February 1807, and states that a male had been shot near the same place a fortnight previously (Orn. Dict., Suppl.). Dr. Moore records one shot near Plymouth in the winter of 1826, and mentions two others in collections there (Trans. Plym. Inst. 1830). One, a female, was killed by Mr. F. Scoble Willesford on Dartmoor, October 5th, 1831 (T. J., Bray's 'Tamar and Tavy,' i. p. 352). Another was supposed to have been killed at Widdecombe-in-the-Moor a few days before (*id.*, *l. c.*). One at Plymouth, November 24th, 1855; one adult, November 10th, 1877; Bolitho had one shot on St. John's Lake by Mr. Wills of Tor Point (J. G., Zool. 1856, p. 4946; 1878, p. 54; and MS. Notes).

Stone-Curlews are occasionally obtained near Kingsbridge (E. M., Mag. Nat. Hist. 1837). Mr. Henry Nicholls has received many from that neighbourhood. One at Prawle Point, February 5th, 1864, shot at the same time as a specimen of the Little Bustard by Lieut. Pearce. One killed in Stokenham parish early in May 1889 (R. P. N. and E. A. S. E., MS. Notes). One from Kingsbridge is in the A. M. M. (R. C.). Two from Paignton are in the Torquay Museum.

One was killed at Topsham before 1838 (F. W. L. R., MS. Journ. i. p. 145). One near Exeter, January 1866. One on Dawlish Warren, March 22nd, 1867 (C. S., Zool. 1867, p. 760). One at Powderham, on the Exe, November 1868. A male shot by Mr. R. Cockeram at Budleigh Salterton in 1836 is in the A. M. M. (F. W. L. R.).

One was shot on Braunton Burrows in January 1858 by Mr. G. Mathias of Ilfracombe (M. A. M., Zool. 1858, p. 6264).

Turton and Kingston speak of its breeding "in the neighbourhood of the moor" [Dartmoor], laying its eggs on the bare ground. Others have reported it as breeding there, but probably confusion has been made between this bird and the Common Curlew.

Family **GLAREOLIDÆ.**[**Collared Pratincole.** *Glareola pratincola* (Linn.).

An accidental visitor, of extremely rare occurrence. No specimens have been actually obtained in the county, but it has been killed on several occasions in Dorset, Somerset, and Cornwall, and therefore its reported appearance on Dawlish Warren and in Flete Park is not improbable.

"On the 7th of September, 1851, my friend, W. W. Buller, Esq., saw two Collared Pratincoles on the Warren, a large sand-bank at the mouth of the Exe, South Devon. They appeared very tame, occasionally alighting on the sand, on which their movements very much resembled those of the Ring-Dotterel. Their manner of flight was very much like that of the Swallow.—T. L. Powys: Lilford Hall, Northants, October 9th, 1852." (Zool. 1852, p. 3710.) The late Mr. F. W. L. Ross informed Mr. J. Gatcombe that he had seen two specimens also on Dawlish Warren (J. B. R., Trans. Plym. Inst. 1862-63, p. 70).

A single Pratincole is said to have been seen by a son of the Rev. G. C. Green, of Modbury, near the banks of the Erme in Flete Park, on 14th August, 1885.

Mr. E. H. Rodd records two Cornish examples: the first was said to have been obtained in September 1811 near Truro, and the second was killed in the first week of June 1874 near the Lizard. "This bird [Mr. Rodd examined it in the flesh] was observed by a boy who was out Coot shooting, flying backwards and forwards like a Swallow over a large pool on the Lizard Downs, and apparently hawking for insects. On its alighting on the margin of the pool, he shot it." (Rodd's 'Birds of Cornwall,' p. 84.)

In Somerset we know of but one instance of a Pratincole, which was shot some years ago on the northern slope of the Mendip, not far from Weston-super-Mare, and was for some time in the collection of Mr. Straddling of Chilton Polden, near Bridgwater, passing subsequently into the possession of Mr. H. Mathias, of Haverfordwest, in whose house we have had the pleasure of seeing it. In Dorsetshire Mr. Mansel-Pleydell speaks of three Pratincoles: one of them was shot during a very severe winter on the banks of the Stour, when the river was frozen over, and is in the Bryanston collection, and the other two were seen, but not obtained—ono of them on the eastern side of the county, near Christchurch, and the other in November 1855 flying over the Weymouth Backwater. Thus, in the S.W. of England, four examples of this rare visitor have been obtained, and as many as seven more (including two others said to have been seen by Mr. Ross on Exmouth Warren) have been seen, but not procured, between the months of June and December.

The Collared Pratincole runs with great swiftness on the ground, and feeds on insects, for which it also hawks in the air like a Swallow. It is an inhabitant of Southern Europe, Asia, and North Africa, and only rarely strays as far north as the British Isles. A beautiful pair in our collection were shot by Mr. G. F. Mathew, R.N., on the Plain of Troy, while flying over one of the classic streams in company with a great number of the same species.]

Family **CHARADRIIDÆ.**

THE PLOVERS.

The first of the two predominant types of the *Limicolæ*, or Plover-Suipe order, comprising the Pluvialine or Plover-like birds, forms a large and well-marked group. They have usually but three toes, the hinder one being entirely absent except in the Grey Plover and Lapwing. The bill is something like that of a Pigeon, with a convex horny terminal point, behind which it is contracted. The wings are usually long and pointed, reaching when folded to or beyond the tip of the tail, and the bend is often spurred in foreign species. About a dozen representatives of the group have been met with in the British Isles, including the aberrant Cream-coloured Courser and the Oystercatcher, each of which is placed by some authors in a distinct family; and several of them are amongst our commonest shore-birds and must be familiar to every one; but some, namely the Cream-coloured Courser, Eastern Golden Plover, Kentish Plover, Little Ringed Plover, Killdeer Plover, and Sociable Plover, are amongst our rarest visitors from Southern Europe, Asia, Africa, and America. They are mostly migratory, breeding on the *tundras* and morasses of Northern Europe and Asia, though the Golden Plover, Kentish Plover, Ringed Plover, Dotterel, Lapwing, and Oystercatcher breed in some parts of the British Islands. The Golden Plover, the Dotterel, and the Lapwing or Green Plover are well known to the epicure for their delicate flesh; but the rest of the species, feeding mainly on muddy shores, are fishy in taste and are seldom eaten. The eggs of the Lapwing are collected in great numbers in the Eastern counties for sale, the semi-transparent white and the richly coloured yelk being the most delicious eating

when hard boiled. Although when looked at in the hand a Lapwing is a bird of conspicuous colouring, on one occasion, when watching a flock, feeding on a newly-ploughed field, from behind a hedge not far off from the birds, we were surprised at their sudden disappearance without our having seen them fly away, and then discovered that in certain positions relative to the light they were perfectly invisible and remained so till they changed their place again.

Cream-coloured Courser. *Cursorius gallicus* (Gm.).

An accidental visitor, of very rare occurrence, in spring and autumn in the north of the county.

The Cream-coloured Courser, as the colour of its plumage indicates, belongs to the desert type, and is only found on the sandy wastes of North Africa and Asia and on a desert island of the Canary Group. So closely does it harmonize in the tints of its plumage with its surroundings that it becomes quite invisible when it squats upon the ground, over which it runs with great rapidity in search of insects, and is said to be particularly fond of grasshoppers. It is nowhere numerous, and is a very wary bird, difficult to approach. It very rarely comes north of the Mediterranean, so that it is remarkable that so many examples of its occurrence, perhaps thirty or more, should have been recorded from various parts of the United Kingdom. Of these Devonshire and the West Country can lay claim to a full share. In the last week of October 1856 we chanced to go into the bird-stuffer's shop in Barnstaple, and found lying on the counter a Cream-coloured Courser in the flesh, which we ascertained had been sent in from Braunton, where it had been shot by the Vicar, the Rev. J. W. R. Landon. Another was in company with it, and this second bird was shot a few days later by a farmer at Braunton, sent into Barnstaple for preservation, and came into the bird-stuffer's possession. We were informed that it was a very beautiful specimen; unfortunately, we had left North Devon, and so missed seeing it. The bird-stuffer advertised it in the 'Field,' and eventually sold it for £10 for the collection of the Prince of Wales. We have, however, ascertained that this specimen does not now exist at Sandringham. We carefully examined the first of these two Coursers, and considered it to be an adult; the scutellæ of the legs were very iridescent, having somewhat the appearance of a snake's skin; but this, as the weather was extremely close at the time, may have been due to incipient putrefaction. In March 1860 Mr. G. F. Mathew, R.N., was Snipe-shooting on the Braunton Burrows, when he observed a pair of strange birds in the air, flying round one of the large shallow ponds left by the recent rains, which after a while settled on the margin of the pond, at a distance from him of about three hundred yards; and he was greatly

surprised, on stalking the birds from behind a sand-hill, to see within a hundred yards of him a fine pair of Cream-coloured Coursers—one, seemingly, an adult male in splendid plumage, the other a female or young bird. They were accompanied by a single Lapwing, which kept continually getting up and flying over their heads screaming, which caused the birds to be wild. Mr. Mathew waited about half an hour behind the sand-hill, in the hope that the birds would walk within shot; but as they would not do this, he attempted to approach them, when they rose directly on his showing himself, settling again by another pond some distance off. He again followed them; but this time they rose wild and flew right up into the clouds out of sight, uttering a peculiar cry. He was quite certain as to his identification of the birds. (M. A. M., Zool. 1857, p. 5346; G. F. M., 'Naturalist,' 1866, p. 359; J. G., Zool. 1871, p. 2475; G. F. M., Zool. 1860, p. 6980.)

In Cornwall Mr. Rodd knew of no occurrence of this rare and beautiful bird; but since the publication of his book one was reported by the late Mr. Thomas Cornish, of Penzance, as having been obtained in December 1884 at Mawgan, near St. Colomb.

Mr. Cecil Smith knew of no Somerset example: but Mr. Brooking Rowe, in his 'List of the Birds of Devon,' mentions one which was procured in that county, but gives no particulars about it. Mr. Mansel-Pleydell states that Lord Digby, when following the hounds in 1853, observed a Cream-coloured Courser on Batcombe Down; on the next day Lord Ilchester sent his keeper to look for it; the bird was found and shot, and is now at Melbury.

The eggs of the Cream-coloured Courser were until quite recently among the desiderata of oologists. But the birds have been detected nesting on Fuerteventura, one of the Canary Islands; and during the last three years a number of their eggs have been sent to England from this locality. No nest is made, and the eggs are deposited on the bare, sandy, gritty soil, and are very protective in their colour. Some, in our series, are exactly like miniature eggs of the Stone-Curlew.

Golden Plover. *Charadrius pluvialis*, Linn.

A winter visitor, but sometimes remaining until late in the spring, and stated to have been formerly resident in small numbers, a few, it was supposed, breeding on Dartmoor and Exmoor. Flocks visit the marshlands in the estuaries of the larger rivers in October and November, at which time there is a considerable immigration from more northern countries, and the numbers seen in winter are sometimes large, especially in severe weather. Specimens in full breeding-plumage occasionally occur near Exeter, Kingsbridge, and Plymouth in April and May.

The Golden Plover is chiefly known in Devonshire as a regular autumn visitor from the North, flocks making their appearance at that time of the year on all our moorlands, whence in severe frosts they descend into the meadows, and are then also found upon the coasts. In the middle of the

day, unless it be foggy weather, they are difficult to approach. The most favourable time for stalking the "trips" is just at daybreak, when they will usually suffer the gunner to get within easy range. Or, by concealing one's self, and imitating their whistling call-note, the flocks passing overhead may be decoyed within gunshot. They will be seen to pause uneasily in the air, and will then make a downward swoop, and after a few wide circles will sweep all at once close over the spot from whence the treacherous whistle is issuing, when a fatal volley will lay numbers on the ground. We have made good bags in this way on many occasions, and have obtained them in the winter on Lundy Island by employing this artifice. The cry of the Golden Plover is frequently to be heard at night as the birds pass over to their feeding-grounds, as this species is nocturnal in its habits. When we used to visit the sallow blooms in the spring at night-time to capture the moths feeding on them, we have had passing flocks of Golden Plover attracted by our lights, and have heard the "swish" of their wings, and their wailing cry, as they have flown low over our heads in the dark.

The Golden Plover was very plentiful near Plymouth in the autumn of 1872, and again in October 1873 (*J. G., Zool.* 1873, pp. 3396, 3786). It is common in some winters, both on the uplands and lowlands, during snow near Kingsbridge (R. P. N. and E. A. S. E., MS. Notes). Flocks visit the Exminster marshes and Dawlish Warren every autumn and winter. One was killed at Topsham, May 14th, 1844, and one in adult summer plumage at Crediton, April 18th, 1877. The Rev. Thos. Johnes says:—"The natives assured me that the Golden Plover bred in Fur Tor Mire, which is a vast and dismal swamp on Dartmoor" (Bray's 'Tamar and Tavy,' 2nd edit. i. p. 307). Dr. E. Moore records that a brood of six was obtained on the banks of the Tamar in 1827; and two young ones were found on Roborough Down in 1829 (*Trans. Plym. Inst.* 1830). Common on Dartmoor and the neighbouring heaths in summer (T. & K., 1830). At present Golden Plovers are by no means common at any season of the year on the northern side of Dartmoor (M. A. M.).

The Golden Plover is reported to have nested formerly on Dartmoor, but there is no record that we know of in recent years that either the eggs or nestling birds have been procured, and we ourselves do not believe that at the present time this bird nests anywhere in the South-western counties, or anywhere further to the south than perhaps on the Breconshire mountains in South Wales. Birds in their full breeding-plumage have been shot late in the spring, but this is no proof that they were nesting in the county.

The eggs of the Golden Plover are singularly beautiful, and their blotches of madder and dark russet on a rich olive ground render them very similar in their tints to the peaty soil and its vegetation on which they are placed. They are of large size, pear-shaped, like all eggs of Plovers and Sandpipers, and are arranged on the ground with their points inwards, so that the bird may be able to cover them.

The excellence of the Golden Plover as a bird for the table is well known. The *pure white* lining of the wings and axillaries, together with the absence of the hind toe, will always distinguish this species from the Grey Plover.

[*Observation.*—Another species of Golden Plover, *Charadrius fulvus*,

J. F. Gmelin, with smoke-grey axillaries, inhabiting Asia, Australia, and the Pacific Islands, has occurred twice—once in the East of England and once in the Orkney Islands. A form of this species inhabiting North America, and now known as *Ch. dominicus*, Müller, has also been obtained from Leadenhall Market, and once in Perthshire.]

Grey Plover. *Squatarola helvetica* (Linn.).

[Silver Plover.]

A casual visitor to the estuaries of our larger rivers in the south of the county in autumn and winter, and rarely in spring; but a regular winter visitor to North Devon. Specimens in full summer plumage have been occasionally obtained.

The Grey Plover is a regular autumn visitor to the British shores from the far north, but is never numerous. In North Devon we generally saw it singly, sometimes in pairs, and rarely in small flocks of from a dozen to twenty birds. We have succeeded in whistling these small flocks within range where we have had tall rush clumps at hand in which to conceal ourselves, and have also frequently stalked and shot single birds. One day in the middle of May we watched from behind a bank near Instow a flock of about a score of these beautiful birds in their full summer livery, as they were running on the sand only twenty yards away. The sun was shining on their silver backs, and the pretty contrast between their polls and thighs (which seemed dazzlingly white, like fresh-fallen snow) and their glossy black underparts made a beautiful picture. We gazed and admired, and, not wanting a specimen, left them unmolested.

The eggs of the Grey Plover, which closely resemble those of the Golden Plover, were almost unknown until the birds were detected breeding by Messrs. Harvie-Brown and Seebohm, in the summer of 1875, on the *tundras* of the Petchora river in Northern Russia. From its feeding on the oozes on the shore, the flesh of the Grey Plover is rank and valueless for the table.

Mr. Elford, of Bickham, near Roborough Down, informed Polwhele that he had met with only two specimens of this bird. Moore says that Drew, Pincombe, and himself all had examples in summer and winter plumage (*Mag. Nat. Hist.* 1837, p. 319).

At Plymouth one occurred, January 5th, 1854 (B., MS. Notes). One was killed and others were seen on the Breakwater, November 1873; some, November and December 1878, October 1881, January 1882; and one in nearly full summer dress, May 19th, 1882. It is very rarely found at Plymouth so late in the spring (*J. G., Zool.* 1874, p. 2837; 1879, pp. 112, 115; 1882, pp. 65, 456, 458).

On the Kingsbridge estuary this Plover often occurs in autumn on the mud, and Mr. H. Nicholls has one that was killed in the spring with a black breast. Mr. Elliot shot one, August 12th, 1889 (R. P. N. and E. A. S. E., MS. Notes).

Mr. Cecil Smith says that he saw some young birds at Teignmouth in November (year not mentioned) in the poulterers' shops ('Birds of Somerset,' p. 335).

On the Exe estuary one occurred September 28th, 1839 (F. W. L. R., MS. Journ. iii. p. 25). One was brought to us in the flesh shot near Topsham, October 24th, 1851. Dr. W. R. Scott and Mr. R. Cumming had specimens from Dawlish Warren. Mr. W. Tombs also had some in summer and winter plumage, presumably from the Exe.

An immature bird occurred at Exmouth in the autumn of 1890, and another in January 1891.

The Grey Plover is included amongst occasional visitors to Lundy Island (Trans. Devon. Assoc. viii p. 309).

In Cornwall, according to Mr. E. H. Rodd, it is a spring and autumn migrant, most frequently seen at the latter season after storms. In Dorsetshire it regularly visits Poole Harbour at the period of its migrations, being commoner in autumn than in spring, and a few are sometimes met with on the coast in winter ('Birds of Dorset'). Mr. Cecil Smith terms it a rather numerous winter visitor to the muddy shores of Somersetshire. In some parts of the kingdom this bird is known as the "Mud Plover."

Kentish Plover. *Ægialitis cantiana* (Lath.).

A casual visitor, of extremely rare occurrence.

A pair occurred on Plymouth Breakwater on May 7th, 1861; the female was shot, and is now in Mr. F. C. Hingston's collection (J. G., MS. Notes; J. B. R., Trans. Plym. Inst. 1862-63); and besides these we know of only one other Devonshire specimen, one in immature plumage that was obtained in the Hamoaze in the autumn of 1875 (J. G., Zool. 1876, p. 4719).

Although a regular spring visitant in small numbers to the South-east coast of England, where it arrives about the end of April—a few pairs still, perhaps, nesting on the least disturbed parts of the Kentish and Sussex shores,—this extremely pretty little Plover is very rare indeed in the South-west counties; so much so that Col. Montagu appears never to have come across a specimen, and concluded, from descriptions of it furnished him by friends, that it was no more than an accidental variety of the common Ringed Plover. Had that excellent naturalist been supplied with a few examples, he would have readily detected its specific distinctions; for in all stages of plumage its dark-coloured legs and smaller size make it easily distinguishable from the two Ringed Plovers, which have either bright-yellow or flesh-coloured legs, according to age. Considering that the Kentish Plover is not uncommon in the summer-time in the Channel Islands, it is singular that its westward range does not oftener include Devonshire. But it has never been our good fortune to come across an example of this species ourselves in the West of England, and it is only due to its occurrence on two occasions at Plymouth that we are able to mention it as a Devon bird. It is equally rare in Cornwall, where Mr. Rodd knew of only three examples, which had, at different times, been procured in the neighbourhood of Penzance. In Dorsetshire Mr. Mansel-Pleydell states that, although it had doubtless occurred, he was not aware that it had ever been identified. We ourselves know of a single Somerset example, although Mr. Cecil Smith was unable to include the species in his book. Mr. Filleul, of Biddisham, shot a small Plover on the coast near Burnham, which he at once saw to be distinct from the Ringed Plover, and, on examining some Sussex specimens which we were able to

show him, at once identified his bird as a young Kentish Plover. The adult male of this little Plover has a bright chestnut patch on the crown of the head, which fades away almost entirely in birds which have been any time preserved.

The Kentish Plover lays its three eggs on the shingle just above high-water mark; and from their grey colour, spotted with black, they harmonize so well with the tints of the surrounding pebbles that they are very difficult to find.

Ringed Plover. *Ægialitis hiaticula* (Linn.).

[Catpoll, Cathead (*Exe*); Sea Lark, Sand Lark, Ring Dotterel, Dulwilly, Curwilly, from its cry.]

Resident and numerous in the estuaries of the larger rivers, both in North and South Devon, but most abundant in the winter. Two young ones were captured on Dawlish Warren in August 1854 by the late Charles Hall, of Topsham, and we found four eggs on the shingle there in July 1887. Major H. C. Adams, of Exmouth, informs us that he has often found the eggs there also. A few breed on the sands between Torcross and Start Lighthouse (R. P. N.). The Ringed Plover is an occasional breeder on Lundy Island (Trans. Devon. Assoc. viii. p. 308).

The eccentric gestures of this small Plover must be familiar to most visitors to the sea-side, where it is to be met with throughout the year, who have watched it running over the sands or shingle, suddenly bringing itself to a stop, as it throws its head up into the air with a jerk sufficient, one would think, to dislocate its neck, then running briskly on for a few more yards, when again comes the sudden stop and quick jerk, and then, perhaps, the bird will stand motionless for a moment or two before proceeding with its performance as before. So closely does the back of the Ringed Plover resemble the grey shingle in colour that often one may nearly tread upon it before it is observed, when it will start up with a shrill whistle, and flitting on a short distance, settle again on the shingle and at once become invisible. The Ringed Plover breeds all round the coast wherever there is a pebbly beach; the Northam Burrows, in North Devon, are a favourite nesting-place, and the four eggs laid in a little hollow scratched out by the bird are of a stone-buff, spotted with black, and from their protective resemblance to their environment are most difficult to find; but still harder to detect are the little grey puffs of down which represent the young birds, on which we have again and again nearly set our feet when we have been peering for them with all our eyes, and have had the two old birds trailing their wings and feigning lameness within a few inches, in order to tempt us away from the cherished spot. In the winter-time our breeding-birds receive large reinforcements from the north, and then large flocks may be seen on the sands or flying along their edges when the tide is flowing in.

The cheerful pipe of this lively little Plover is one of the familiar sounds of the shore which we love to hear.

We have seen flocks of Ringed Plovers sometimes many miles inland, and have been told by a keeper, who recognized the bird in our collection, that they nest in places on the Wiltshire Downs, scratching little holes in the turf in which to deposit their eggs.

There is a smaller race of Ringed Plover (by some ornithologists termed *Ægialitis intermedia*, as by Ménétriés), which arrives on our coasts in the spring, and is well known to the shore-shooters, who say that its call is different from that of the larger bird. We possess examples in all stages of plumage, and it was an immature bird of this smaller race shot by us on the sands of the Taw which we once erroneously recorded as a specimen of the Continental Little Ringed Plover (*Ægialitis curonica*, J. F. Gmelin) (Zool. 1859, p. 6762), of which we have seen but one example which had been obtained in the S.W. of England. This was in the collection of Mr. E. H. Rodd, and had been received by him from Treseo, in the Scilly Islands, where it had been shot on October 23rd, 1863, by his nephew, Mr. F. R. Rodd, who detected it to be a stranger by its single sharp whistle, differing from the cry of the common Ringed Plover. The Little Ringed Plover appears to prefer inland waters to the coast, being chiefly observed on the Continent by the sides of rivers and freshwater lakes. It has occurred only about four times in the South of England.

[*Observation.* — KILLDEER PLOVER (*Ægialitis vocifera*, Gould). This Plover is one of the numerous American species which have appeared as stragglers at the extreme south-west of the kingdom. American birds on their migration, which have lost their reckoning in coming westwards by way of Northern Asia and Europe, in working south again come down the western coasts of Scotland and England, and, passing through the Irish Channel, strike the North Devon coast, or, continuing a little further, land at last in the Land's End district of Cornwall, some few of them reaching the Scilly Islands. It was at Treseo, on the Scilly Islands, that an example of the Killdeer Plover was secured on 15th January, 1885 (T. Cornish, Zool. 1885, p. 113). It was shot by Mr. Jenkinson, who was attracted by its peculiar cry, and described it as "a large Ringed Plover with ash-coloured legs, tail-coverts chestnut-coloured, and tail very long." A specimen of this Plover had already occurred in England, one having been shot near Christchurch, in Hampshire, in April 1857. The Killdeer Plover is a very common species throughout the United States, resident, and nesting almost everywhere.]

Dotterel. *Eudromias morinellus* (Linn.).

A casual visitor, of rare occurrence, in spring and autumn.

If at any time the Dotterel nested on any of our Devonshire moorlands, as it probably did not, being a bird of the Alpine type, or on the Mendip plateau in Somerset, it certainly does so no longer, and is at the present time only occasionally seen on its passage in the spring and autumn. Until recently a few used to nest on the mountains of the Lake District,

and a pair or two still breed on the most lonely and inaccessible spots in the Scotch Highlands. "A person of credit" informed Col. Montagu that he had taken the eggs of the Dotterel upon the Mendip. The Colonel adds that young birds used to be shot there early in September (but there is no proof in this that they had been bred there), and was of opinion that the bird whose nest was taken there in the summer was probably a Golden Plover, or, as we rather imagine, a Stone-Curlew. Even as a straggler, the Dotterel is very rare in Devonshire. At the end of September 1863, the Rev. Marcus Rickards saw and shot a single Dotterel on the mud-flat at West Appledore, after a long chase, the bird running on in front of him and feigning lameness. On the 22nd of October, 1875, Mr. J. Gatecombe was rewarded, after ascending the Great Hangman Hill, near Combe Martin, by finding a Dotterel upon the top. "On our gaining the summit of this great hill, I at once caught sight of a Dotterel, which almost immediately took wing, uttering a rather low or feeble note, sounding to me something between that of the Purre and Ringed Plover. It did not, however, fly far, but alighted again within a short distance, giving me a good opportunity of examining it with my glass, noting its actions, and making several sketches of its attitudes. It afterwards became very tame, moving slowly about, now and then stopping suddenly to look round, listen, or pick up something, and finally allowing my approach to within fifteen yards. It was altogether prettily marked, and the white band above the eye was very conspicuous. The top of Great Hangman has rather a wild aspect, reminding one of Dartmoor, being covered with stones, heath, and low gorse, and is, I should think, just the place where Dotterels might be found on their first arrival in spring. The view from it is truly magnificent, but the sight of the Dotterel alone, the first I had ever met with in a wild state, far more than repaid me for a rather hot walk of altogether full twenty miles" (Zool. 1875, p. 4717).

Montagu says of the Dotterel: "It is very rare so far west as Devonshire; at least one only has come to our notice in many years" (Orn. Diet., Suppl.). Several were seen by the Rev. S. Rowe on Chittaford Down, Dartmoor, in September 1828; many specimens were shot on Dartmoor in April 1840 (E. M., Rowe's Peramb. Dartmoor, p. 231). A pair shot at Sewer Farm, near the Bolt Head, December 22nd, 1851, are in the collection of the late Mr. J. Elliot of Kingsbridge. One was shot by the late Mr. Thos. Floud in the autumn of 1852 on Whitstone Hill, near Exeter, and was given to us in the flesh. One was seen in January 1867 on Dawlish Warren by the late Major George Woods, and three others have occurred in that locality at various times. Two immature birds were killed on the Exe in August 1870. A trip was seen, and three were shot, at the end of May 1879 near Barnstaple (M. A. M., Zool. 1879, p. 490). Mr. Gatecombe records an example purchased in Plymouth Market, December 12th, 1886 (Zool. 1887, p. 379). One was picked up on Salcombe road, killed by flying against the telegraph wire, in May 1885 (E. A. S. E.). Mr. Henry Nicholls has a specimen in summer plumage from the Sewers, near Bolt Head.

A few Dotterel have occurred at rare intervals in the immediate neighbourhood of Barnstaple, and we have received from that town specimens both of adults and of immature birds; but more have been observed and obtained in the south of the county, about the southern slopes of Dartmoor.

The Dotterel is equally rare in Cornwall and Dorset, while in Somerset it occurs with no greater frequency than it does in Devonshire. We have

known it to be shot occasionally in the spring and autumn on the Mendip, and a single Dotterel shot on the Steep Holm early in May 1869, and sent into Weston-super-Mare for preservation, was seen by us in the flesh. About the middle of May in the same year, a small trip alighted on the cricket-field just outside that town, and were so tame that they continued there all day, taking no heed of the players. A few days later, we ourselves saw a single Dotterel on the sands near Sand Point, a few miles to the east of Weston-super-Mare. Mr. F. D. Power states that on 1st May, this same year, he obtained five Dotterels which had been shot on the previous day on the Mendip close to Wells. Out of a small flock of nine or ten seven were killed. On 21st August, 1870, he reports that two more were obtained near the spot where this massacre took place.

Mr. H. P. Hart (Zool. 1881, p. 64) has recorded that two Dotterels were shot by one of the keepers of the lighthouses on the Lizard on 28th April, 1880, between two and three o'clock A.M., as they were hovering around the lantern, attracted by the electric light. Mr. J. Gatcombe (Zool. 1885, p. 21) reports that five Dotterels, killed out of a trip of eight in the month of May in Dorsetshire, were sent to Plymouth for preservation. It is a little singular that in the last of the interesting notes communicated by our friend to the 'Zoologist' (1887, p. 379) he should mention his having purchased, on 12th December, a young Dotterel which had been sent into Plymouth Market from Dartmoor, where it had been shot, adding "this is the first local specimen I remember to have met with."

Lapwing. *Vanellus vulgaris*, Bechst.

[Lapwink, Horniwink, Northam Hornywink (*N. D.*); Peewit, Green Plover.]

Resident in part, generally distributed and very abundant in winter.

This is one of the birds that are annually increasing in number. It breeds on Dartmoor, at Huish Ley and Thurlestone Ley, Haldon, Woodbury, and other wild marshy and uncultivated moorland tracts; formerly also on large open fields near the south coast. Immense flocks assemble on the estuarine marshes and mud-banks of our larger rivers in winter, when there is an extensive immigration from the east. It is found on fallow-lands in spring, on moorlands in summer, and on mud-banks and marshes in winter, appearing on the estuaries at the end of October or early in November. During the severe weather in February 1873, we saw great numbers flying around the houses at Holcombe (between Dawlish and Teignmouth) like Pigeons, and very tame, many also flying out to sea. Lapwings were extremely numerous in January 1882 at Plymouth (J. G., Zool. 1882, p. 456). Very large flocks frequented the Exe estuary below Topsham during the winter of 1889-90 from November to February. Lapwings were seen arriving from the eastward by thousands, and the whole country was covered with them after the snow-storm of December 20th, 1890; they remained only a few weeks.

In North Devon the Lapwing breeds very commonly on the Braunton Burrows, on some marshy fields on the Lustow side of the river Taw, and on all the high moory country to the east and west of the county. Numbers frequent Exmoor, and the moors bordering on that forest, throughout the summer. In the winter-time the flocks collect and come down to the marshes, and should the weather be severe they are then found in water-meadows searching for food. After long-continued snows and black frosts numbers perish of starvation, so that frozen Peewits are then to be seen lying on the ground by the side of the "splashets," where they have made their last feeble efforts to obtain sustenance. In one severe winter several Peewits, together with one or two Golden Plovers, frequented our garden for some time, but would not touch the food we prepared for them, which we put for their notice in various places on the lawn. It was pitiable to see the Peewits running a foot or two on the frozen ground, and then stopping abruptly to listen (as a Thrush does) all in vain for any sound of a worm moving below the hard-bound soil.

Turnstone. *Streptilas interpres* (Linn.).

A passing visitor, met with usually in small parties on the sea-coast, and in the estuaries of our larger rivers in spring and autumn. Only one instance of its occurrence in winter in the south of the county is known to us, though a few remain on the north coast during that season, and, according to Mr. Cecil Smith, it is a winter visitor to Somerset. Specimens in full breeding-plumage are occasionally obtained late in the spring in South Devon.

Next to the Purre and the Ringed Plover, the Turnstone is the commonest and the best known of the smaller birds which frequent the British shores. A lover of the shingly beaches and seaweed-covered pebbles, the Turnstone may be noticed with his curious awl-shaped beak, busily engaged in turning over the small stones and refuse cast up by the tide, in search of the small marine animals concealed beneath. Little parties of five or six, consisting of the old birds and the year's brood, appear on the North Devon shores from the north at the beginning of August, and, on their first arrival, are singularly tame and confiding. We have seen them on the sands at Weston-super-Mare in the very midst of the bathing machines, at the busy hour of the day, when hundreds of people are there assembled either to bathe or to look at the bathers, hardly taking the trouble to run out of the way of the numerous passers to and fro. When walking on the beach at Lustow, in North Devon, we have had a little flock fly straight towards us and settle at our feet. Sometimes the Turnstones are found consorting with Knots and Ringed Plovers, but it is more usual to find them by themselves. As they rise on wing they utter a clear whistle, and hearing this we have often distinguished them in the flocks of birds sweeping by the water's edge. The greater number of those reaching us from higher latitudes in the autumn, after spending a few days on our coast, continue their journey further south, but a few

are to be met with on the rocks and shingles all through the winter. In April and May large flocks make their appearance for a day or two on their passage to their northern breeding-stations. The birds are then wild and difficult to approach, and the males are in their singularly beautiful breeding-plumage, which consists of vivid alternations of bright chestnut, black, and white. Some very perfect specimens in the complete spring dress in our collection were obtained on the sands at Weston-super-Mare.

Although there is no record of the Turnstone's nest ever having been detected in the United Kingdom, it may probably have bred in Scotland, and a pair which were unfortunately shot on Lundy Island on 28th May, a few years since, may have had a nest.

There is hardly any part of the world in which the Turnstone has not been observed. On the N.W. coast of America, another species, of a more sombre plumage, is met with.

At Plymouth specimens were obtained on 15th and 17th September, 1853, and three on September 9th, 1856 (B. MS. Notes); several nearly completely moulted, September 1882, and one in the market on December 28th following (J. G., Zool. 1883, pp. 165, 166).

The Turnstone occurs in small numbers in most springs near Kingsbridge, and is abundant there in the autumn. In May 1889, Mr. E. A. S. Elliot found a small flock about the rocks outside the harbour at Kingsbridge, and shot some, which proved to be all old males (R. P. N. and E. A. S. E., MS. Notes). A female was procured on the Exe in August 1839 (F. W. L. R., MS. Journ. ii. p. 55). Two were seen by us just below Topsham, April 24th, 1856. Some on the Exe estuary, August 1870. One was shot below Topsham, August 23rd, 1876. Other specimens have occurred on the Exe estuary and at Exmouth, but the dates were not recorded. We have also seen Turnstones on the sea-beach near Teignmouth, and they have occurred on the Teign (Trans. Devon. Assoc. vi. p. 711), but these birds appear to be more plentiful on the northern than on the southern coast of the county. Very large flocks occurred at Instow, September 14th, 1871 (J. H. G., Zool. 1871, p. 2845), and family parties of five or seven were numerous in September 1874 (G. F. M., Zool. 1874, p. 4251). Four were seen on Braunton Burrows, August 21st, 1886 (O. V. A., Zool. 1887, p. 71). The Turnstone is only an occasional visitor to Lundy Island (Trans. Devon. Assoc. viii. p. 309), where Mr. Howard Saunders saw a pair on May 28th, 1861 (Yarrell's B. Birds, 4th ed. iii. p. 290).

Oyster-catcher. *Hematopus ostralegus*, Linn.

[Sea Pie.]

Partially resident, but principally only a passing visitor in spring and autumn. It formerly bred amongst the rocks near Start Point (E. A. S. E.). Some remain all the year, especially on the north coast, and a few breed on Lundy Island (Trans. Devon. Assoc. viii. p. 307). It is rarely common at any time on the south coast, but is most frequently met with in small parties from August to October, on the sea-shore and in the river estuaries, and is then sometimes in adult winter plumage, but more generally the specimens met with at that season are immature birds.

The whistle of the Sea Pie is one of the familiar sounds of the coast, and at all times of the year the bird may be met with on its favourite haunts upon the shingly beach, or on the mussel-beds when these have been left bare by the retreating tide. It is not so often seen upon shores

composed exclusively of sand or ooze. A few pairs remain in the west of England, to nest on such places as Lundy Island, on Start Island at the mouth of the Bridgwater river, on the Scilly Isles, and on the Dorsetshire coast near Poole; but the greater number go north, returning in large flocks in the autumn. Early in August little parties consisting of old birds and their broods, which have been reared perhaps at no great distance, make their appearance at Instow, in North Devon, and are then very tame, and the young birds we have found to be excellent for the table. In the winter-time we have seen enormous flocks of Sea Pies off the Northam Burrows, but these great gatherings, comprising many hundreds, admit of no approach. Their shrill, chattering cry can be heard at a great distance. Col. Montagu has remarked that the Sea Pie never leaves the coast, but had he travelled much in Scotland he would have found the Sea Pie in the breeding-season not rare many miles inland, feeding in meadows in company with Jackdaws and Hoodies, and nesting on the pebbly margins of rivers and lochs.

We have found the nest of this bird placed on the top of islands off the Pembrokehire coast among the fern, and, standing close to some newly-hatched young ones, have had the two old birds flying low and anxiously above our heads, when we greatly admired the handsomely contrasted plumage of pure white and jetty black with the bright orange bill and pink-coloured legs, effectively seen against a background of the purest blue sky.

At Plymouth Dr. E. Moore found the Sea Pie not uncommon near the sea-shore in small flocks in winter (Trans. Plym. Inst. 1830, p. 322). One was killed in 1854, and two September 9th, 1855 (B. MS. Notes). Nine were seen on May 16th, and several young birds on August 25th, 1873; nine were killed on the Breakwater, September 8th; and several in December 1876. Some occurred along the coast in September 1879 and in October 1881. Sea Pies were plentiful at the end of August 1882, when a flock of thirteen was seen on the Tamar. A curious variety, with a narrow white streak running from the base of the under mandible down the throat, was killed in December 1882 (J. G., Zool. 1873, pp. 3629, 3719; 1876, p. 5045; 1877, p. 47; 1880, p. 47; 1882, pp. 65, 459; 1883, p. 166).

"It is not very common on the coast near Kingsbridge. Some undoubtedly bred amongst the rocks near Start Point some years ago, on the evidence of Mr. Holdsworth, but the colony was entirely destroyed by some miscreant staying at the time at Torcross, who shot the whole lot. I have seen them a few times on the coast, but only once in the estuary. A pair were killed at Thurlestone in the autumn of 1876, and two were seen at Bantham, August 30th, 1879. A bird kept alive at Plymouth made an interesting pet, and was remarkably tame and playful" (E. A. S. E., MS. Notes).

On the Exe a Sea Pie was killed in September 1845, and one shot there in the summer of 1851 had a *sharp-pointed* bill (F. W. L. R., MS. Journ. ii. p. 152). Mr. W. H. Beadon brought us a female which he saw struck down and killed by a Great Black-backed Gull on the mud-banks below Topsham on February 24th, 1853. It had a very large wound in the side, and the Gull attempted to carry it off in its bill, but dropped it after taking it up about twenty feet in the air. Mr. Ross possessed a specimen that was nearly all black, obtained in the spring of 1855. Two were shot in August, and one with a white throat on September 4th, 1876. We saw another specimen with a white throat for sale in Exeter on October 5th, 1880. Four were seen at Exmouth, September 8th, 1882; two or three occurred there in September 1889, and several were obtained in September 1890. We saw one on the beach on May 15th, and one was killed at the end of August 1891.

Mr. Cecil Smith saw one in Torbay in August 1875. Two were seen by us near Teignmouth, August 23rd, 1876.

Family **SCOLOPACIDÆ.**

THE SANDPIPERS AND SNIPES.

The great family of the Scolopacidæ includes a number of interesting birds, whose haunts are moors and marshes, the edges of inland pools and streams, and the sand-flats and oozes of the coast. Among them are included such familiar birds as those favourites of the sportsman, the Woodcock and the Snipe. Few of them are ever to be seen unless they are sought for in the special localities they frequent, highly cultivated land being avoided by them as affording little prospect of their needed food. They are nearly all migrants to our country from high latitudes, and some of them seek such distant nesting-quarters that their eggs are still almost unknown. Although this family has been for years the object of our special search, and we have wandered far and wide after them, over many a mile of marsh and by many a shore, yet we have gained more knowledge into their habits from a few visits to the Fish House at the Zoological Gardens than we could ever have acquired from only flushing and shooting them in their wild state. A few examples of the rarer Sandpipers visiting our country have been kept alive at various times at the Zoological Gardens, and by watching them we have had revealed to our eyes many a secret—*e. g.*, what the Ruff does, when he feeds and drinks, with his seemingly inconvenient excess of neck-feathers; how the Godwits and Avocets work their long and strange-shaped beaks in procuring food, and so on; even the Knots and Common Sandpipers, when studied at the distance of a few inches, became better known to us than they had been before. Most of the birds of this family have more or less elongated legs and toes, which bear them

up as they tread and run daintily over the soft ooze where they feed, and long beaks for probing the ground for worms. They all of them lay comparatively large pear-shaped eggs upon the ground, usually four in number, which are invariably arranged with the tapering ends pointing inwards; and all their eggs are beautifully coloured with different shades of green and russet, and are thus protected from easy discovery owing to their harmonizing with the tints of the surrounding ground. They are all somewhat wary and "sporting"-looking birds, flying with great swiftness when flushed, and, from their connection with moor and bog, sandy shores, and wild scenery, are objects of interest to the sportsman and naturalist alike. Their young when hatched are covered with down, and a few hours after emerging from the shell they are able to run about and feed themselves. Devonshire and Cornwall are remarkable for the number of American representatives of this family which have visited these two counties. These are *nine** in number, as against *three* recorded by Mr. Stevenson for the great county of Norfolk,

* Pectoral Sandpiper, *Tringa maculata*. Devon (North), Cornwall, and Scilly Isles.

Bonaparte's Sandpiper, *Tringa fuscicollis*. Devon (North), Cornwall, and Scilly Isles.

American Stint, *Tringa minutilla*. Devon (North) and Cornwall.

Bull-breasted Sandpiper, *Tryngites rufescens*. Devon (North, Lundy) and Cornwall.

Bartram's Sandpiper, *Actiturus longicauda*. Cornwall and Somerset.

Solitary Sandpiper, *Totanus solitarius*. Cornwall, Scilly Isles.

Yellowshank, *Totanus flavipes*. Cornwall.

Red-breasted Snipe, *Macrorhamphus griseus*. Devon (South) and Cornwall, Scilly Isles.

Esquimaux Curlew, *Numenius borealis*. Cornwall, Scilly Isles.

The Spotted Sandpiper, *Tringoides macularius* (Linn.), another American species, is mentioned by Dr. Moore, on the authority of Mr. Newton, as having been obtained on Dartmoor (Rowe's Peramb. Dartmoor). The species is not admitted into the British List by Mr. Howard Saunders, and there is no well-authenticated instance of its occurrence in the British Islands. It is closely allied to our Common Sandpiper or Summer Snipe. The Yellowshank mentioned by the late Mr. Ross in his MS. Journal of Occurrences in Natural History, vol. iii. p. 52, shot on the Exe in 1840, was probably a young Redshank.

perhaps the richest in all the kingdom in its list of Waders.

We shall remark on the Phalaropes further on.

[*Observation.*—There is a small Sandpiper, less in size than a Jack Snipe, included in the British list, the Broad-billed Sandpiper, *Limicola platyrhyncha*, which has not yet been obtained in the S.W. of England, and has only occurred four or five times in the Eastern Counties, and once in Ireland. This species is to be readily distinguished by its broad beak, which gives it its name. Its summer-quarters come as close to us as Sweden and Norway, so that it is singular it does not oftener visit this country. In its breeding-plumage it has dark feathers on the back, edged with yellow and rufous, and in its winter dress it is grey like the Dunlin.]

Avocet. *Recurvirostra avocetta*, Linn.

A casual visitor, of rare occurrence, in autumn, winter, and spring.

In former days this singular-looking bird was a regular summer visitor to the fenlands in the eastern counties, where it nested commonly. It is now only a rare occasional straggler to this country, and has been but seldom seen in Devonshire.

Polwhele mentions a specimen obtained on the Dart (Hist. of Devon). Dr. E. Moore says that Avocets had been often seen on the Exe, from whence Mr. Comyns obtained the two in his collection. One in the possession of Mr. Tripe was shot on the Tamar (Trans. Plym. Inst. 1830, p. 331). He also mentions Avocets obtained on the Tavy and the Kingsbridge estuary (Rowe's Peramb. Dartmoor, p. 234). These probably comprised the four mentioned by Yarrell as having been obtained in Devonshire (B. Birds, 2nd ed. ii. p. 625). One near Plymouth in Nov. 1854 (J. G., 'Naturalist,' 1855, p. 72; Morris, B. Birds, iv. p. 225).

An Avocet was shot by Mr. Prettijohn, of Charleton, on the Kingsbridge estuary, in the autumn of 1839 (H. N., Zool. 1847, p. 1694; and MS. Notes). Three, a male and two females, were shot in the same locality early in October 1880; two of these, a male and female, on 5th and 18th of the month, fell to the gun of Mr. E. A. S. Elliot. The male, the largest, measured 17 inches in length, and weighed 10½ oz. The females were 15¾ inches long, and weighed 9 oz. each (H. N., Zool. 1880, p. 486; and E. A. S. E., MS. Notes).

One was shot on the Dart, September 1874 (G. F. M., Zool. 1874, p. 4230). A flock of six was seen on the Exe estuary in November 1837 (F. W. L. R., MS. Journ. i. p. 44). One killed on Dawlish Warren, in December 1844, is now in the A. M. M. (W. R. S., Zool. 1845, p. 983). One obtained on the Exe estuary, October 6th, 1855, was nearly entirely white in plumage, having very little black on it (W. D'U., Zool. 1855, p. 4895). We believe this specimen was in Mr. Byne's collection. One shot on the Exe, March 20, 1867, is in the A. M. M. Two were obtained at the end of October 1888, at Exmouth.

In the winter of 1855, a small flock frequented the estuary of the Taw and Torridge, and three were shot near Bideford. Many years had to pass before another Avocet could be recorded from North Devon, and it was not until the month of November (13th) 1888, that one was obtained near Instow, which is now in the Museum of the Westward Ho! College. Another was shot on the Barnstaple river on the following day.

In Cornwall the Avocet is also very rare, as Mr. Rodd could mention only two; one of these, shot close to the Land's End, 13th Sept., 1847, he examined in the flesh. Since the publication of his book, a third Cornish example has been recorded by Mr. H. P. Hart (Zool. 1880, p. 487), which was shot on the river Fal, near Truro, August 21st, 1880. We are not aware of any Somerset Avocet; but in Dorsetshire a few have occurred, the most recent one mentioned by Mr. Mansel-Pleydell having been obtained at Poole in 1869.

Avocets appear to be nowhere numerous on the Continent, except in the marshes of Southern Russia. The long recurved beak of the bird is used for the purpose of scooping the mud in search of worms; zigzag lines will be found traced on the sand and ooze wherever any Avocets have been feeding. A flock of Avocets is very noisy, and in old times the birds were called "Yelpers" by the fenmen, on account of their vociferous cries. The birds employ their long legs in wading deep into the water, and it is said that they also swim with ease, the toes being webbed.

Black-winged Stilt. *Himantopus candidus*, Bonnat.

An accidental visitor, of extremely rare occurrence. No specimen has been obtained in Devonshire within the last half-century.

Two are recorded by Dr. E. Moore; one occurred at Slapton Ley, according to Mr. Gosling, and the other was in the possession of Mr. Comyns (Trans. Plym. Inst. 1831, p. 331; and Mag. Nat. Hist. 1837, p. 322). Dr. A. G. C. Tucker includes the Black-winged Stilt in his list of some rare birds discovered near Ashburton. A Mr. Stephens assured Mr. Walter Moyle that one of these birds (*Himantopus*) had been shot at "Brampton [*query* Braunton] on the North Sea, in Devonshire" (The works of Walter Moyle, Esq., in two vols. London, 1726, *vide* Harting, in Rodd's 'Birds of Cornwall,' Introduction, p. xxx).

This curious bird, which derives its name from the extreme and seemingly disproportionate length of its legs, is only a summer visitor to the southern counties of Europe, from Asia and Northern Africa, very rarely indeed straying so far north as England. With the exception of the one referred to by Mr. Moyle, the only Devonshire occurrences belong to the south of the county. In Cornwall five were once killed at a shot near Penzance, about the year 1720 (Rodd, 'Birds of Cornwall,' p. xxx); but the only specimen Mr. Rodd knew of recent years was one which was shot at the Swanpool, near Falmouth, and recorded by Mr. Cocks ('Naturalist,' 1851, p. 114).

We have seen one from Somerset, which was shot near Bridgwater many years ago, and was first in the collection of Mr. Straddling, of Chilton Polden, but now belongs to Mr. H. Mathias, of Haverfordwest. On the authority of Mr. W. Thompson, Mr. Mansel-Pleydell has recorded a Black-winged Stilt, which was shot at Lodmoor, in Dorset, in 1837.

THE PHALAROPES.

The Phalaropes are very graceful birds, lobe-footed, and elegant swimmers, and of the two European species the Red-necked Phalarope, which is the smaller, breeds annually in a few places in Scotland and in the Hebrides, while the Grey Phalarope is an autumn visitor to our coasts from the far north. They are both remarkable for the changes in their plumage, which in the summer dress has more or less red about it, and in the autumn has the red replaced by grey. The same changes are also characteristic of most of the Sandpipers. The Grey Phalarope is more numerous as a species, and after severe autumn gales is occasionally driven into the English and Bristol Channels in large flocks. In the first edition of Yarrell's 'British Birds,' we find the Phalaropes placed between the Rails and the Geese; but they are now regarded as members of the Sandpiper family, with which they have more affinity in their habits, colour of their eggs, long secondaries of the wings, structure of the tail, &c., than they have with the Coots, which they only resemble in their lobed feet. Their true position, however, in our opinion, is near the Gulls and Terns, birds they resemble in their marine habits, the buoyancy with which they swim in the roughest sea, the facility with which they can rise from the surface of the water, the manner in which they cross the tips of their wings over their backs when swimming, the texture and the delicate grey and white colour of their plumage (in winter), and the great variability of their eggs.

Red-necked Phalarope. *Phalaropus hyperboreus* (Linn.).

A casual visitor, of very rare occurrence.

An immature example was obtained at Plymouth in 1831 (J. G.). An adult, in summer plumage, was killed on the Hamoaze just off Torpoint,

June 7th, 1869 (J. G., Zool. 1869, p. 1920). Mr. J. H. Gurney received this bird from Mr. Gatecombe and tells us it is a perfect specimen. In an annotated copy of Dr. E. Moore's List of Devonshire Birds, lent to us by Mr. Gatecombe, we found the following entry concerning this species:—"Bolitho had a specimen in winter plumage, shot near Bovisand." This must have been the example obtained in 1831 mentioned above, and appears to have been killed in the autumn.

In September 1881, a Red-necked Phalarope, in winter plumage, was shot on Dosmare Pool, on the Bodmin Moors. Mr. J. Gatecombe saw this bird in a bird-stuffer's shop at Liskeard (Zool. 1881, p. 197). In the Truro Museum we saw one almost in complete summer plumage, which had been received from Looe. The Red-necked Phalarope has been obtained on other occasions in Cornwall, and on the Scilly Isles, generally in October. We have no record of one from Somerset, and in Dorset it occurs very rarely in company with flocks of the Grey Phalarope.

The Red-necked Phalarope is described as being an exceedingly tame and confiding bird, utterly fearless of man, and as swimming with ease and grace, resembling a miniature duck. On the Orkney Islands it is said to have been exterminated to satisfy the greed of collectors; but in the Hebrides, where it is still permitted to survive, it places its cup-shaped nest, composed of grass and a fine kind of reed, close to the edge of some pond or lake. In Mr. Dresser's beautifully illustrated 'Birds of Europe,' vol. vii., there is a very pretty picture of a pair of Red-necked Phalaropes, attended by their freshly-hatched young. Mr. W. Theobald, late Deputy Superintendent, Geological Survey of India, kindly informed us that this species was obtained in Madras in 1854.

Grey Phalarope. *Phalaropus fulicarius* (Linn.).

[Coot-footed Sandpiper.]

A passing visitor, usually in autumn, appearing about the middle or end of September and in October, remaining occasionally till December or January. This Phalarope is seldom seen in spring, and is generally met with on, or near, the coast, rarely far inland.

A slightly larger and more northern species, and going by the name of the Grey Phalarope, because it is usually observed on our coasts in its grey winter plumage, this species might well be termed the Red Phalarope, if we named it in accordance with its dress in summer. As hardly an autumn passes without a few being noticed it might almost be considered a regular visitant, and in some years, when violent south-westerly gales blow in September or October, the migrating flocks on their passage south are driven into the English and Bristol Channels, and are noticed in great numbers along the sea-shore. These pretty little tempest-tossed wanderers meet with the usual hospitality accorded to "rare birds," and are shot down, or stoned to death, while they are vainly seeking shelter on the beach. We have frequently had the pleasure of seeing them on the Barnstaple river in September and October, either single birds or two or

three together, and this in tranquil weather when there had been no previous gales to send them to our coasts.

One day when sailing from Barnstaple to Instow, we passed quite close to two swimming like tiny ducks upon the water. We have one in our collection which was shot at Instow in January, which is in perfect winter plumage. Several which we have seen obtained in the autumn had still traces of the summer plumage in the yellow and rufous edges to some of the feathers. These Phalaropes present a good instance of the method by which a change of colour is accomplished in the plumage of various birds—not by shedding the feathers, but by the wearing off of their margins and the growth of the feathers outwards. The autumn of 1866 was memorable for the great number of Phalaropes which appeared upon our southern coasts after a great storm. Numbers were reported both from North and South Devon, as well as from the Cornish and Dorset coasts; and the Bristol Channel shared in the visitation, as some were procured at Weston-super-Mare. A few were driven far inland, appearing in strange places, one having been actually caught inside the railway-station at Bishop's Lydeard. The violent southerly gale of October 12th and 13th, 1891, again compelled a vast number of Grey Phalaropes to seek the shelter of our southern coasts. Flocks of a hundred or more were noticed at Weymouth, as many as had been seen in Poole Harbour on a former visitation, and there was not a locality on the sea-board of the S.W. counties from which Grey Phalaropes were not reported. Mr. G. F. Mathew, R.N., twice crossed the Bay of Biscay in H.M.S. 'Tyne' during that stormy month, and informs us that on the 4th, in the middle of the Bay, the ship passed through several small flocks of Grey Phalaropes; and on 28th, on their return from Malta, the birds were encountered again about the same spot. A strong Nor'easter was blowing, and the Grey Phalaropes were sitting very buoyantly on the water, and were so tame that they would hardly get out of the way of the ship. They were in little flocks of five or seven.

The Grey Phalaropes obtained on our shores are almost always in immature or winter plumage, but Mr. Gatecombe shot a female in September 1866, strongly stained with red on the under surface (*Zool.* 1866, p. 500). Mr. Henry Nicholls, of Kingsbridge, killed a fine male in summer plumage in May 1844; it was swimming between the quays off Findar Lodge (H. N., MS. Notes). One in moult, with some orange-brown feathers of the breeding-plumage still remaining, was captured alive by a boy in Stonehouse Creek, on August 5th, 1876 (*J. G.*, *Zool.* 1876, p. 5083). A specimen, in full summer plumage, which was in the collection of the late Mr. Bond, was said to have been obtained in Devonshire. Phalaropes are rarely seen after October, and winter occurrences are not frequent. One was seen in December 1872, and one on January 10th, 1873, at Plymouth, and these were the only two instances known to Mr. Gatecombe in thirty years up to 1873. One occurred at Kingsbridge, December 17th, 1875, and one at Devil's Point, Stonehouse, December 5th, 1876 (*J. G.*, 1868, p. 3445; 1877, p. 46; and *in litt.*). One at Bantam, November 27th, and another at the same place December 4th, 1880 (E. A. S. E.). There appears to be a large form which is occasionally met with. One obtained on Northam Burrows on September 24th, 1869, measured 10 inches in length (*Zool.* 1870, p. 2025); and one at Plymouth in October 1870, was nine inches long (*Zool.* 1871, p. 2442). (The length of a female, which is slightly larger than the male, is given as eight and a quarter inches in the 4th ed. of Yarrell, vol. iii. p. 314.) The contents of the stomachs of various Grey

Phalaropes examined by Mr. J. Gatcombe, in October 1886, consisted of the bodies and wings of small brown beetles, one valve of a very thin and minute marine shell, and many fragments of decayed seaweeds (Zool. 1887, p. 377).

In October 1831, great numbers of Phalaropes accompanied a large dead Rorqual floating in the Channel, which was brought into Plymouth Sound (E. M., Mag. Nat. Hist. 1837, p. 322).

Great flights visited the south coast of Devon in October 1845 and October 1846. In the latter year we had the pleasure of watching a flock of seven which remained for several days swimming about in our marsh at Newport, near Topsham, which was flooded at the time. They swam briskly about, always changing direction together exactly at the same moment, and looked like miniature ducks. They were all shot, and several of them are in the A. M. M. The late Dr. W. R. Scott relates that several were killed on the quay at Exeter in October 1845. Large flocks visited the south coast at that time, and they appeared to have had a long flight and to be quite worn out, so much so, that many were caught with the hand, others knocked down with sticks, and large numbers were shot as they sat till very closely approached (Zool. 1849, p. 2384). In September 1866, large numbers visited the county, being most numerous on the south coast. Two were obtained as far inland as Tiverton. In September, October, and November 1870, large flocks appeared on both the north and south coast (Zool. 1871, pp. 2423, 2442), and this bird was again numerous in September and October 1875 (Zool. 1875, pp. 4717, 4739) and October 1891. An interesting account of the last visitation to the S.W. coast of the county was communicated by Mr. Edmund Elliot to the 'Field,' October 17th, 1891. Hundreds visited Torbay (W. E.). We saw a few at Exmouth between the 14th and 18th October, and ten were shot there. They were very tame, and allowed us to approach quite close to them as they swam about amongst the rocks, incessantly dipping their bills in the water.

In North Devon the Rev. Marcus Rickards saw and procured many specimens of the Grey Phalarope in different years on the Northam Burrows. Some were met with swimming on ponds in the middle of the Burrows, and one was noticed on a little stream in company with some ducks. A large flock occurred on these Burrows in 1866, and other flocks were seen after the great gales of October 1891. Grey Phalaropes run upon the ground as lightly and gracefully as the Common Sandpiper.

The records of the occurrences of the Grey Phalarope in Devon are very numerous. We find that some were obtained in each of the following years, those marked with an asterisk being remarkable for large flights, viz. :—1821, -28, -31*, -40, -44, -45*, -46*, -49, -53, -56, -57, -66*, -67, -68, -69, -70*, -72, -73, -74, -75*, -76, -77, -80, -81, -82, -86, -89, -91*.

The Grey Phalarope spends the summer in the far North, nesting commonly in Greenland and other circumpolar regions.

Mr. J. H. Gurney says that "observations show that the North Sea is not in the line of route which the main body of Grey Phalaropes take in autumn, and this, it may be, is because they come from Greenland" ('Field,' Nov. 14th, 1891). The greater portion probably pass south to the west of Ireland. This accounts for their being so much more numerous in the S.W. counties after southerly gales than they are on the east coast of England; and on the return migration in spring they probably follow the same line, hence they are not often met with at that season on our shores, as they keep far out at sea. Some few find their way by the Rhine and Rhone valleys to the Mediterranean, and even to the Arabian sea, stragglers reaching Bombay. One specimen was obtained by Mr. E.

Blyth in the Calcutta Bazaar. We have seen either this species or Wilson's Phalarope, or perhaps both kinds, very numerous in small parties at sea off the coast of California in October, but they were rather wild.

Woodcock. *Scolopax rusticula*, Linn.

[Muff-cock (*N. Dev.*.)]

A resident in small numbers, but principally a winter visitor.

The mild and humid climate of Devonshire, with the numerous covers abounding in warm springs that extend on either side of its sheltered valleys, make it a favourite resort of Woodcocks, which are generally plentiful, and in severe winters, when a large part of the kingdom is deeply covered with snow, they flock into it from all quarters, being then especially abundant in covers near the coast. The Devonshire Woodcocks, like most of those obtained on the western side of the kingdom, belong almost exclusively to the red race; specimens of the grey eastern form are very rarely seen. Extra large birds go by the name of "Muff-cocks" in North Devon.

Very large arrivals of Woodcocks take place at Bindon and Dowlands, near Axmouth, on moonlight nights in October (G. P. R. P., 'Book of the Axe,' p. 25). Forty-two couples were shot in Shute Park in the season of 1883-84, as we learn from Mr. T. Clode, steward to Sir W. E. Pole. Woodcocks are sometimes plentiful in Woodleigh Woods, near Kingsbridge (E. A. S. E.). In November and December 1890, at a time of severe frost, they were very numerous in many parts of the county. Woodcocks very rarely strike the lantern of the Start Lighthouse, and have not been reported from the Eddystone.

This bird is sometimes met with in South Devon in August and September. Two were killed near Bovey, September 25th, 1864. One was seen on Wooda Farm, Stratton, in Cornwall, just over the border of Devon, early in August 1890 ('Exeter Gazette'), but no more were seen until 10th November following. It has often been obtained about 6th October, but the 10th October is generally considered the average date of the first arrival, the main body seldom appearing before the middle of that month, and many continue to arrive up to the middle of December. The time of departure is the beginning of March. On Lundy Island Woodcocks have been seen as late as May and as early as August (H. G. Heaven, Trans. Devon. Assoc. viii. p. 308). Several instances of Woodcocks breeding in Devon are known. Polwhele says it breeds on Dartmoor, and Dr. E. Moore records a young bird which was shot at Cann Down, near Bickleigh Vale, in May 1830 (Mag. Nat. Hist. 1837, p. 319; Rowe's Peramb. Dartmoor, p. 231). Bellamy also says "it has been known to breed here" (Nat. Hist. S. Devon, p. 211). In 1853 a nest with four eggs was found in the parish of Whitstone, near Exeter. The young were hatched on April 23rd, as we were informed by the late Mr. Thomas Floud, on whose property the nest was found (W. D'U.). Three Woodcocks were flushed early in April 1891, near Stokeleigh ('Exeter Gazette' for April 6th, 1891). Woodcocks bred in France Wood, near Stokeley, in 1891, several being seen during the summer months (W. V. T.).

We knew of a Woodcock being caught among some brambles in a small cover close to Barnstaple in July, and years before any discussion on the subject had appeared, either in the 'Field' or in the 'Zoologist,' we were told by a farmer who resided at the top of a large wood, a very good Woodcock-cover, about midway between Barnstaple and Ilfracombe, in the parish of Bittadon, that he had seen the old Woodcocks in the spring carrying their young ones down to the "splashets" to feed. We think that some of the "early Woodcocks" recorded in the autumn are most probably birds which have been hatched in the county.

As most sportsmen are aware, Woodcocks vary greatly in weight, and we have put numbers into the scales, our lightest having been $8\frac{1}{2}$ oz., and our heaviest exactly double that weight, 17 oz. We have always considered a 12-oz. bird a good Cock. Young birds of the year shot early in the season would average $10\frac{1}{2}$ oz.; the heaviest birds are met with after Christmas, our 17-oz. Woodcock was killed in North Devon early in February.

White and cream-coloured varieties have been obtained and are not very rare. Montagu had a cream-coloured specimen presented to him by Mr. Bulteel, of Flete; another was purchased in the Exeter Market by Mr. Comyns, who had also a white variety shot by the Hon. Newton Fellowes at Exmouth (*E. M., Trans. Plym. Inst.* 1830, p. 326). One with white feathers in the wings was shot in 1837 on the manor of Monkleigh, near Tiverton, having frequented the same spot for five years (Yarrell, *B. Birds*, 2nd ed. iii. p. 16). A similar specimen occurred in North Devon in October 1859. Mr. T. Clode shot a buff-coloured Woodcock at Waitchcombe, near Honiton, which was preserved by Mr. Anning, bird-stuffer, Honiton, for Mr. W. Baines, who was at the time residing at Shute Park. A buff-coloured one, with white wings, occurred to us in North Devon, and a white one was shot at Portledge that had been seen in the covers for several seasons in succession.

Mr. J. Gattombe has described a very pretty variety which was sent into Plymouth from Cornwall, that had a pure white patch on the top of its head, a ring round the neck taking in part of the chest, and white wing-coverts, the bases of the primaries being also tinged with the same; the other parts were of the usual colour, or perhaps a shade lighter, the whole plumage strongly reminding him of that of the Snow-Bunting in winter; its legs appeared to have been nearly of the usual tint, with the exception of a pure white claw on one toe of each foot. In the same note he mentions a singular way in which the boys of Looe and Polperro capture Woodcocks, "with bent pins attached to a short string, one end fastened to a peg, which is driven into the ground, the pin baited with a worm. I have this year heard for the first time of five Woodcocks having been taken by that method" (*Zool.* 1881, pp. 96, 97).

At the beginning of the present century Woodcocks do not appear to have been more numerous in the county than they are at the present day, if Col. Montagu's game-lists, kept by him at the time he resided at Kingsbridge, are to be considered as any evidence. From some of these in our possession (which we received from the Rev. J. Hellins), it would appear that Col. Montagu took great interest in the pursuit of Woodcocks, as they are chiefly recorded, to the exclusion of other game, the number flushed each day, the number fired at, and those brought to bag being carefully set down, as well as the various woods which were tried. The commonest entry is "4 flushed, 2 killed," and 13 was the greatest number seen by the Colonel in any one day during the period covered by these lists. We consider that the system of Pheasant-preserving and the battue have largely contributed of recent years to the increase of the Woodcock all over England. When a great cover is shot through it is quite common for the Woodcocks when flushed, as we have frequently noticed, to fly back over the beaters' heads, or if they come towards the guns to fly so low, about the height of a man's shoulders, as to offer a very dangerous shot which few would venture to take, and thus at the end of the day not many appear in the bag. Probably this cover is only shot once or twice again at the outside, the majority of the Woodcocks escaping as before, and is then, for the sake of the Pheasants, kept quiet until the following season. Being thus practically undisturbed in many a large wood, more and more Woodcocks every year remain in the south

of England to nest, and the stock throughout the kingdom is largely increased. We generally saw the first Woodcock on 7th or 8th October, on Dartmoor. The bird would usually flip up from the heather at some spot where it was least expected, not unfrequently when we were sitting by the side of a big stone eating our lunch, and, disappearing at once over a rounded hillock, would be lost ere we could mark it down. We never found many Woodcocks on the open moor, but sometimes they would be plentiful in the small covers on its edges. During heavy snow we have known upwards of twenty couple of Woodcocks to have been shot in one day on the Braunton Burrows, and in similar weather large bags are made in the woods at Lynmouth. In one famous cock-cover in North Devon we have been told of thirty-five and a half couple having been shot in a day's beat. In former days, before the island had become cultivated, great numbers used to resort to Lundy in severe winters, such as that of 1860, when we had the good luck to be visiting there. A heavy fall of snow brought us at once a large flight of Woodcocks, which made their appearance all over the island, one being actually found in the kennel squatting in a corner, and another in the "garden,"* hiding behind the stump of a cabbage. On the first day we went after them we made a bag of ninety-three head, Cock and Snipe, but the greater part consisted of Cock. The birds would be frequently noticed either running over the snow in front of the dogs, or squatting two together by the side of a tump of grass or small tuft of furze, their bills resting on the snow, and their tails overlapping, offering, when flushed, a very easy double shot. As the snow and frost continued for three weeks, we had constant fresh arrivals of Woodcocks, single birds being noticed in the daytime coming down from a height and pitching on the ground, and we had excellent sport every day we went out. Occasionally, when a Woodcock was flushed, it uttered a chattering cry, very similar to that of the Fieldfare, and we do not remember to have heard this cry anywhere else. Sometimes a Cock, shot at the edge of the sidlings, fell over into the sea below, where it was instantly seized and devoured by Gulls. Most sportsmen who have shot Woodcocks must have had instances in their experience of birds dropping as if dead to the shot, and then rising again and going off as if completely uninjured when an attempt was made to pick them up. In the game-larder at Lundy we had many couple of Cock deposited on the shelves which had been shot on Christmas Eve, and none being wanted for the next day, the door was not opened until the morning of the 26th, when we heard screams proceeding from its neighbourhood, and found they came from the cook, who, on entering the larder, had discovered four or five of the Woodcocks "come to life again" and running about on the floor! Sometimes Woodcocks may be seen in strange places. Calling one day on a friend, we flushed one by his hall-door which was squatting by the side of the scraper; the bird disappeared in the shrubbery. We were once ferreting with a keeper on the bare top

* The garden at Lundy is only a large square pit dug out of the ground, in which a few vegetables are raised. The violent winds would uproot and sweep out to sea anything planted on the unprotected surface of the ground.

of a hill in the Dartmoor country. The rabbits were bolting badly, and the ferrets were lying up in an earth, where we were tediously kept for upwards of an hour. The ground round the earth was quite bare, save for one little tump of furze close at hand. We were stretched on the ground listening at the holes in turn for any intimation of the ferret's whereabouts, and we chanced accidentally to give this tump of furze a kick, when up sprang a Woodcock which had been lying close in it all the time. We jumped up, seized our gun, and cocking a barrel fired rather hastily at the bird, striking it, but not sufficiently to bring it down, as it flew on over the plantations, and was finally lost to view when heading in the direction of the house, half a mile distant in the valley below. The next morning, while we were at breakfast, some one opened the hall-door, and we heard an exclamation, and on going to see what was the matter, found on one of the steps a Woodcock fluttering with a broken wing—our bird, we thought, of the previous afternoon. Our next story has reference to a Woodcock's feigning death. It was told us by a friend who used to shoot in a very favourite Woodcock-cover in Cornwall. One day, having had good sport, bagging several couple, he called at the house of an old lady who owned the wood, as he was on his way home, to leave her a present. He rang the front-door bell; the servant came: "My compliments to your mistress, and I wish to give her a couple of Cocks;" and then his man took one out of the bag and handed it to the servant; but, on taking out the second, as he relaxed his grasp to put it into the servant's hands, the bird gave a sudden start and flew away! My friend had his gun loaded, and fired at the Cock as it was going over the house, dropping it on the roof. "*There!*" said he to the servant, "*you will find the other up on the leads.*" Our own Woodcock-covers are very furzy and full of brambles, and in working through them we were continually losing our silk pocket-handkerchiefs, which were dragged from our pockets by the thorns. These we sometimes found on going subsequently the same beats. One frosty morning we perceived a small white patch shining like silver in the sun on the other side of a narrow valley, and crossing over discovered it to be one of our white silk handkerchiefs frozen stiff as a board and covered with hoar-frost. It was resting on the tops of some dwarf furze, and as we lifted it up we flushed a fine Cock which was squatting beneath it, which we marked into the cover and bagged.

On Lundy Island we saw a Woodcock shot when it was sitting on the top of a stone wall, and once in a cover in North Devon a Woodcock which had been flushed several times alighted on a limb of a large Scotch fir some ten feet above the ground.

Woodcocks lie very dead in the covers, and are often passed both by the beaters and by the spaniels. We had a small strip of plantation which invariably held a Cock, and we went to it one day with a spaniel we had on trial. The dog worked it up and down, and nothing rose, and we then went and tapped an accustomed bush with our gun-barrel, when immediately a Cock was flushed, which we shot. We have often detected a Woodcock on the ground—not an easy thing to do, as the plumage of

the bird so exactly resembles in its tints and markings the fallen leaves and twigs amongst which it is crouching, and the instant the bird's eye has caught ours, and it has perceived that it has been seen, it has risen on wing. Sometimes, instead of flying up, Woodcocks will run on a little through the cover and crouch in another shelter, and when we have been standing in a ride cover-shooting we have seen two or three run across one after the other. The cleverest cocking dog we ever possessed was a black-and-white fox-terrier. This little animal used to find more Cocks than our whole pack of spaniels, and when she came to a rhododendron bush, beneath which a Cock was harbouring, she would prick her ears, looking steadfastly forward in the direction of the bird, standing for a few seconds pointing with one fore leg raised, generally giving us time to come up before her pounce into the bush flushed the bird. She was also an excellent retriever, finding and bringing us the Cocks from the densest tangle, or from the streams into which they were sometimes dropped; and, in our opinion, the picking up and bringing to the bag a dead Cock is, in a difficult cover, quite as meritorious an act, and to be counted as far towards the attainment of the bird, as the mere shooting of it. In spite of good retrievers Cocks are very frequently lost, especially in furzy covers intersected by small streams, as the birds, falling into the water, are carried down and deposited under some tangled growth of furze and bramble, where it is impossible to discover them. In very hard frosts the thick orchard hedges, which generally have warm ditches by their sides, are in North Devon a very favourite harbour for Woodcocks, and many are shot from them. They are then also found by the banks of little streams, where they will sometimes be flushed in company with Snipe.

Woodcocks are extremely impatient of a high wind, leaving the exposed covers, and crossing the valley to the sheltered sides. The best Woodcock-covers will prove almost blank if they are tried when a cold rough wind has been for a day or two blowing directly into them; and, like Snipe, Woodcocks are continually shifting about with the various changes of the weather. One afternoon, when the season was far advanced, finding a dozen or more Cocks in one corner of a small cover, we sent to a friend, who we knew would be very pleased to have a few shots at them, to come and shoot with us the following day, but he came only to find that they had all passed on elsewhere during the night.

At the end of October Woodcocks are not unseldom flushed in turnip-fields; they are fond of thick furze-brakes on hill-sides, and in covers which have been largely planted with rhododendrons it is found that the Woodcocks gladly shelter beneath the clumps. Woods with plenty of oak-scrub are also favourite resorts, and the first sharp frost sends all the birds down to the alder-beds in the bottoms. It is well known that in most districts where Woodcocks are plentiful there is some favourite spot where the first Woodcock of the season is certain to be met with year after year, just as there are in every cover some particular dingles or bushes where a Woodcock may be always flushed, and where if one be shot another will soon take its place. The Woodcock is a solitary bird;

in mild weather it does not often happen that more than one is flushed at a time, but in hard frosts the birds collect around some favourite warm spring, and we have seen twenty or more put up from such places together. In open weather the Woodcock dozes throughout the day beneath his chosen shelter, and at dusk flies like a Hawk a few times up and down the glades of the wood, or about its outskirts, before settling down to feed on the splashets. When the birds alight on a favourite soft place it is said that they proceed to bore a number of holes with their bills, and then jump and stamp with their feet upon the ground as hard as they can until worms issue from these holes, which they immediately devour; and Snipe are said to employ the same tactics. In old days it was customary to hang up nets across the rides in the woods, to catch the Woodcocks when they were "roding" at "cock-shoot time," and covers where this was successfully done are still called "cock-shoots;" we have a cover with that name on our own property. We have known many Woodcocks taken in North Devon, as well as Snipe, in osier springes, and an old gardener of our acquaintance regularly in the winter-time had his small gins set among the cabbage-plants for Woodcocks, and frequently caught them. Gardens, especially those with high walls round them, and not far distant from woods, are much favoured by Woodcocks, and having such a garden of our own, in which we have repeatedly flushed Cocks among the gooseberry bushes, among clumps of Jerusalem artichokes, &c., we speak from experience. In October, when shooting on the Barnstaple river, we have more than once flushed a Woodcock on the bare sand-flats, probably resting there after a long flight.

The Woodcock hollows out with her breast a little cup in the moss on which she deposits her four eggs, which closely harmonize in their colour with the dead leaves lying around.

The Woodcock has been detected nesting both in Cornwall and Dorset. Large flights occasionally visit the Land's End district and the Scilly Islands, and great bags are made. Mr. Cecil Smith records no instance of a Woodcock's nest in Somerset, but it must surely breed in some of the fine covers which fringe Exmoor and the Quantock Hills.

Mr. J. Gatecombe purchased in Plymouth Market a Woodcock which had five toes on one of its feet; the hinder toe had another quite perfect one growing from it (Zool. 1885, p. 21).

Great Snipe. *Gallinago major* (Gm.).

[Double Snipe.]

A casual visitor, occasionally met with in autumn on the moors. In September and October 1868 no less than seven specimens were obtained in Devonshire.

This fine Snipe is only an occasional visitor from the North of Europe, appearing more frequently in the eastern parts of the kingdom than it does in any of the south-western counties. We have ourselves twice come across it when Snipe-shooting, once on Dartmoor and once in Somerset.

The bird we found on Dartmoor was flushed wild, and marked down among some big stones and furze on a dry hill-side, and could not be moved again; but a few days later we were passing near the spot (this was on 29th September), when we started it from a small wet patch, and succeeded in bagging it, although an equinoctial gale was blowing at the time, and the Snipe was caught up and drifted from us like a leaf. The one we found near Weston-super-Mare, in Somerset, lay as dead as a Jack Snipe, and neither of the Great Snipes we have mentioned uttered any cry when flushed.

The examples of the Great Snipe obtained in this country in the autumn are invariably young birds, so that we feel confident that the "adult" reported as having been shot on Dartmoor on 23rd August, which we include in our list of the occurrences of the bird within the county given below, was a mistake. We have handled a great many British-killed Great Snipes, and never saw one in the unmistakable adult plumage, and we believe there is only a single instance on record of one having been secured in this country in the spring in the complete mature dress.

In November 1846 a Great Snipe was killed on Dartmoor (E. M., Rowe's Peramb. Dartmoor, p. 231). One on Shaugh Moor, September 7th, 1850 (R. A. T., 'Naturalist,' 1851, p. 142). One at Ashburton, October 7th, 1854. One at Plymouth, October 4th, 1856 (B., MS. Notes). Another at the same place, November 13th, 1858 (J. G., Zool. 1859, p. 6377). One at Stoke Canon, near Exeter, October 6th, 1868, now in the A. M. M. One on Dartmoor, September 29th, 1868, and one at Witheridge, North Devon, in the same month (M. A. M., Zool. 1868, p. 1461). Four at Parracombe, North Devon, in September and October 1868 (G. F. M., Zool. 1868, pp. 1460, 1464). One at Morley, September 16th, 1871 ('Field' for September 30th, 1871). An adult on Dartmoor, August 23rd, 1876; one weighing 7½ oz., killed on Dartmoor, in October 1886 (J. G., Zool. 1876, p. 5126; 1887, p. 377). Several others have occurred. One was killed on Lundy Island.

There is no instance of the nest of the Great Snipe having been found anywhere in the United Kingdom. In the 'Ibis' for 1861, p. 88, are some very interesting notes respecting the breeding of this species at Bodö, in Norway, by the Messrs. Godman, who, in May 1857, found ten or fifteen pairs of the Great Snipe nesting together in a marsh near that place, the birds apparently being sociable at the breeding-season. The sitting bird conceals her eggs, and sometimes herself, with moss, which she plucks off the ground around the nest and draws over her back with her beak.

The Great Snipe has occurred several times both in Cornwall and Dorset during the autumn. The weight of the bird is given as from 7 to 8 oz.

Common Snipe. *Gallinago caelestis* (Frenzel).

[Full Snipe, Whole Snipe, Heather-bleater.]

Resident locally, breeding in small numbers on Dartmoor and its neighbouring commons; in some places on the south-west coast; on all the moors and in many marshy meadows in North Devon; also on

Exmoor. The Snipe is, however, mainly a winter visitor, arriving continually from the end of August throughout the autumn and winter, and remaining until the end of March or middle of April; the great bulk of the foreign birds appearing early in October, and being followed by successive smaller flights. Mr. F. W. L. Ross records three killed on the Exe, August 6th, 1839, and we have on several occasions known a few to occur on the Exe and on Haldon in August (1854, 1855, 1863, 1876), but these probably came from Dartmoor. Mr. E. A. S. Elliot rose two Snipe on Milton Ley, August 2nd, 1878, and young birds unable to fly were seen there in 1890 (R. P. N.). On September 17th, 1853, we saw about twenty Snipe flying singly up the estuary of the Exe in the evening, evidently just arriving (W. D'U.).

In mild weather in the winter Snipe are plentiful on the bogs on Dartmoor, and on their first arrival in the estuarine marshes of our larger rivers and in marshy spots near the coasts. Severe frost also brings them to the marsh-lands in considerable numbers. Very large specimens occur on the Exe, as well as near Kingsbridge, on Dartmoor, on the Blackdown Hills, and elsewhere in the county. We have ourselves shot several on the Exe which appear to belong to the variety *russata* of Gould. These large Snipe lie very much closer than the ordinary birds usually do, and we have found it very difficult to flush them, as they allowed us to almost tread on them before they would rise. One of this variety shot on Dartmoor in December 1861 weighed $7\frac{3}{4}$ oz. (cf. a note by Mr. Gatcombe in the 'Zoologist,' 1862, p. 7938; and one by Mr. J. Brooking Rowe, Zool. 1866, p. 97). There is a fine example in the A. M. M., shot by Mr. W. H. Beadon on Blackdown in January 1853. On the Exe this large race was known to gunners as the "Double Snipe," the ordinary form being called "Whole Snipe" or "Full Snipe," and the Jack Snipe was termed "Half Snipe."

A Snipe in the A. M. M. derived from Mr. Ross's collection, but with its place of occurrence unknown, was submitted to the late Mr. John Gould, and considered by him "a variety of the Common Snipe, connecting Sabine's Snipe with the Ruddy Snipe" (*in litt.*). There is also in the same museum a curious melanistic variety of the male shot in 1830, and presented by the late Mr. Ralph Sanders. Mr. Henry Nicholls, of Kingsbridge, has a similar specimen in his collection.

In the 'Zoologist' for 1861, p. 7434, is an interesting account of a tame Snipe kept by Mr. J. C. Upham, of Starcross, Devon. A Snipe caught by a large mastiff in a marsh near Topsham became tame, running about the kitchen of Newport House for some time. The dog brought it up to the house in his mouth without injuring it.

The Common Snipe used to be an abundant bird in Devonshire, and the very great diminution in its numbers during the last half-century is one of the characteristic changes in our ornithology which the enclosure and drainage of moorlands, salt-marshes, and wet highland farms have helped to bring about, the increased number of guns pointed at the birds being also taken into account. Many a moor on which Snipes once nested numerously has disappeared to give place to corn- and turnip-fields.

Many a meadow, formerly ornamented all over with rushes and full of soft splashets, is now through subsoil drainage sound and dry, with not an inch of ground left which could attract a Snipe. In old days there was not a warm ditch by the side of a hedge which did not harbour in the winter-time some half-dozen Snipe, and excellent shooting could be had without going to the moors and marshes, where the birds would be expected mostly to congregate. At the time to which our memory carries us back, twenty-five or twenty-six couple could be had in a day on the Braunton Marsh, and we knew of one sportsman and good Snipe-shot who used to get his six hundred couple in the course of the season on Bursdon Moor and the adjoining commons in the north-west corner of the county around the "West Country" Inn. We have ourselves occasionally found Snipe swarming in peaty turnip-fields on high ground in the late autumn, so that we have killed them in firing at Partridges without intending it, a Snipe coming accidentally in line with the Partridge we were shooting at. On Dartmoor we have enjoyed many years of Snipe-shooting, and never found the birds numerous on the northern and north-eastern portions of the Forest, which were the chief scenes of our rambles. It required straight shooting, and a good amount of walking, to make a bag of six or seven couple; but in the month of September, before the bogs became too wet, and when the weather was generally bright and fine, the delightful scenery of the moor, and the pure elastic air, made the walks most enjoyable, and we did not grumble if the bag was not great. Later on in the season any one who pursues Snipe on Dartmoor must be prepared for a wetting, for even when it is fine below, directly the elevated grounds are reached, they will be found occupied by dense rolling mists and drizzling rain, so that shooting is rendered difficult, and it is sometimes not easy, especially if the sportsman is without a compass, to find the way off the moor when it is time to return homewards. After heavy rains the Snipe leave the bogs, and pass the day on the tops of the hills, squatting by the sides of the small furze-tumps. We have sometimes seen flocks of a hundred or more passing overhead, and a tract of the moor which might one day be quite destitute of Snipe, will be found the next, should there have been some change in the wind or weather, tenanted by scores of the "scaping long-bills." In hard frosts, or in deep snows, the Snipe, almost to a bird, leave the moor and descend to the warm drains in the marshes beneath. In walking over the moor at the end of April we have encountered numerous pairs of nesting-birds, and have had the Snipe drumming in the air all round us. On nearly all the rough moorlands in the north of the county Snipe still nest in greater or less numbers, although there is not a tithe at the present day either of the resident birds or of the migrating strangers arriving in the autumn in comparison with the numbers of bygone years. We have occasionally come across varieties of the Common Snipe, having shot the large red-coloured Snipe, called by Mr. Gould *Scotopax russata*, close to Barnstaple, and one day shot one with a white head, and with a good many small white spots powdered over the back and shoulders. We have never come across the melanistic variety, formerly called Sabine's Snipe, but know of

one shot near Honiton, which was in the collection of our late friend Mr. John Marshall, of Belmont, Taunton. We have two in our collection, but not obtained in Devonshire, and we have others almost pure white, and a very pretty golden-buff one. Both the eggs and the newly-hatched young of the Snipe correspond in colour with the tints of the peaty ground and bog herbage where they are to be met with, and when the nestlings crouch close to the ground, as the young of all the Scolopacidæ, Plovers, Gallinæ, &c. do instinctively on the sign of any danger, it is almost impossible to see them, and we have repeatedly all but trodden upon them, although the actions of the old birds indicated that they were close at hand, before we have discovered them.

There is a very singular district in the West of England where we have often shot Snipe—the Mid-Somerset peat-moors, where occasionally a great number of the birds assemble. The peat is cut out and stacked for burning in squares, and the hollow pieces of ground which remain when it has been removed soon fill in again with half liquid peaty earth, which becomes covered over with rushes and other vegetation, affording plenty of harbour for Snipe, and sometimes Teal. Numerous wide ditches intersect the ground in all directions, many of them fringed with aquatic plants. The shooter either has to cross these with the aid of a leaping-pole, or has some one with him to carry a plank, or, as a *dernier ressort*, has to trust to his jumping powers in order to clear them. We never went to these moors after Snipe without taking a carpet-bag containing a complete change, and there was never an occasion when it was not required. One day, when we were in company with a friend, we simultaneously fell into ditches at some little distance from each other, and our friend, emerging first, looked in the direction from which we had just fired, and stated afterwards that he could see nothing beyond our hat floating on the top of the water! We had dropped a couple of Snipe to a right and left, the birds had fallen on the other side of one of the ditches, and when we attempted to jump it the treacherous bank on the far side gave way, and we tumbled backwards into the water! Nearly the whole time one is shooting on these peat-grounds continual jumping is required from tussock to tussock, as the hollow grounds in the winter-time have generally plenty of water upon them, and if the footing on one of these tussocks is missed, a plunge into nearly knee-deep mud and water is the uncomfortable result. The Snipe are wild, generally springing at a forty-yard rise, so that the keeper's words proved true enough: "Gentlemen as looks down to see where they are going don't get many Snipe." But not all the grounds were as bad as this; still it was, on the whole, a difficult country to negotiate, and the bunch of Snipe we carried off at the end of our day was well earned. We have, after heavy rains in July, occasionally seen swarms of Snipe on the peat-moors at the beginning of August, at which time of the year, as all sportsmen know, the flesh of the birds is rank and dark-coloured, and it would be a shame to shoot them. We have seen Snipe alight on the bare ground by the side of a little ditch, and run at once into cover, and have often been astonished at the small tuft of grass behind which the bird is able to

crouch and conceal itself. The average weight of Snipe shot at the beginning of the season is 4 oz.; adult birds, where there is good feeding for them, will scale 5 oz., and a 6-oz. Snipe is not very rare, but is exceptionally fine. There are some examples of very large Snipe in the Albert Museum at Exeter which we have gazed upon with wonder, which must have scaled 6 oz., and, perhaps, over. The very fine Common Snipe reported as having weighed $7\frac{3}{4}$ oz., would hardly have been credited by us had not that remarkable weight been vouched for by our late friend Mr. J. Gatcombe, whose carefulness and accuracy we well know to have been beyond impeachment; otherwise we should have thought there had been a mistake in identification, and that this very heavy Snipe must have been a fine example of *Scolopax major*. We do not consider that Snipe are fit for the spit until there has been a frost or two, when the flesh becomes white and sweet.

In very hard frosts, if a Snipe be shot at the side of some unfrozen spring or warm drain, another will be found on the same spot in a short time, and having had such a place just outside our garden-wall we have visited it and bagged three or four Snipe from it in the course of the day. This proves that the hungry birds, as they are flying high overhead in search of some possible feeding-ground, are either possessed of very quick sight or of some marvellous instinct which guides them to the suitable spot.

We once saw a Snipe which we had fired at perch upon a bough of a tall ash-tree, and Mr. Mansel-Pleydell has recorded a similar circumstance. We have several times killed two Snipe, which chanced to be crossing each other, with the same shot, and once when we fired at a Snipe it flew on a few hundred yards before it dropped dead on the ground, and as it flew it was accompanied by another one which settled on the ground by its side, and walking up we flushed this second bird and bagged it as well.

Both Woodcock and Snipe arrive continually from the beginning of their autumn migration throughout the whole of the autumn and winter. Not only are there successive appearances of fresh birds from abroad, but those within the country are for ever shifting their position. It is owing to this that the Snipe-shooter who has the range over a likely bog is never without sport. He may kill every bird on his beat one day, but the next time he goes out he will find as many, perhaps more, and so on the time after, and *da capo* as long as the season lasts; a little bog of three or four acres has thus yielded us upwards of sixty couple between September and February.

In very severe frosts we have occasionally found Snipe frozen by their bills to the ground.

Jack Snipe. *Limnocryptes gallinula* (Linn.).

[Jack, Half Snipe, Atterfitter (N. D.).]

A winter visitor, numerous in suitable localities.

This diminutive and prettily-marked Snipe is a winter visitor to this country from the north of Europe, and although we have shot it in Scotland as early as 28th of August, the 2nd of September is the earliest date on which we have met with it in North Devon. On the Dartmoor bogs we generally expected to see it by the 10th September, and we remember six and a half couple of "Jacks" having been bagged on Raybarrow Mire on the 12th September, which was also the date when we used to find the first "Jacks" in the drains on the level in the neighbourhood of Weston-super-Mare. On the Exe, however, none are seen before October, the earliest date known to us being Oct. 5th, 1855; and Mr. Ross mentions one killed Oct. 7th, 1839, in very fine plumage (MS. Journ. ii. p. 124). The Jacks generally appear on our estuaries early in November. They linger longer on Dartmoor than elsewhere in South Devon, and we have seen them there as late as March ('Zoologist,' 1872). In North Devon they remain occasionally till the middle of April.

Mr. Ross gives an account of a Jack Snipe which he kept alive for a month, and which became quite tame. It was fed on worms, which it would take from the hand, chopped raw beef, and a portion of boiled rice, and required three meals a day, the last late at night (Zool. 1846, p. 1331).

We have many times seen this little Snipe seated on the side of a ditch with its beak pointed downwards towards the water, which seemed to be its usual position. When we shot over Dartmoor we had a team of three very handsome Gordon setters, all admirable Snipe dogs, and we can remember one of these dogs one day coming to a point with the other two "backing" at a little distance, and, on walking up to the setting dog, seeing a Jack Snipe crouched before his nose, which refused to rise until we gently touched its back with the muzzle of our gun! One of our setters used to catch these little birds and bring them to our hand perfectly uninjured. We once were on the point of taking a Jack from the dog's mouth when, directly it relaxed its jaws, the little Snipe made off with its butterfly flight, and, crossing a broad ditch, settled in safety beyond our reach. Occasionally we have heard a wounded "Jack" make a mouse-like squeak as we have picked it up, the only sound we have ever heard proceed from the bird. Although usually solitary, Jack Snipe sometimes congregate, and we once put up twelve or fourteen from a small patch of floating vegetation which formed an island in the middle of a cattle-pond. The old pointer we had with us was actually standing these birds, as she was "treading water," after swimming part of the distance between the bank and the little island which contained all the Snipe, every one of them being bagged by us subsequently in detail. We have seen Jack Snipe as late as April 16th on the Somerset peat-moors, and a few days later on the Northam Burrows in North Devon, where we one day came across a considerable number among some high clumps of spiked rush on perfectly

dry ground, and imagined they had assembled there previous to migrating. The Somerset and Dorset Railway runs through the peat-moor country, and both Jack and full Snipe are frequently picked up dead, having flown against the telegraph wires. This must be at night, as a Jack Snipe never flies by day with sufficient velocity to injury itself if it came in collision with anything.

The nest of the Jack Snipe has never been detected in the United Kingdom. This small species breeds in Lapland, Finmark, and other countries in the north of Europe, and its eggs are of gigantic size when viewed in their proportion to the bulk of the bird's body. "While the bird weighs two ounces, its four eggs weigh more than an ounce and a half" (Dresser).

The Jack Snipe is a most toothsome morsel, and when served up on its appropriate toast can be devoured every bit, bones and all!

At the nesting-season the Jack Snipe makes a curious sound while flying high in the air, as the common Snipe does when "drumming," which Mr. Wolley compared to "the cantering of a horse in the distance over a hard, dry road."

Pectoral Sandpiper. *Tringa maculata*, Vieill.

An accidental visitor, of extremely rare occurrence.

The plumage of this Sandpiper somewhat resembles that of a Sky-Lark in its tints. It is well known as an autumn visitor from the extreme north to many parts of America, and is found either singly or in pairs on grassy plains where there are small pools, and as it lies well to dogs is much sought after by sportsmen. On very similar ground a pair were shot by the Rev. Marcus Rickards, on 12th September, 1871, on the Braunton Burrows in North Devon. We quote Mr. Rickards's account of this interesting occurrence from the 'Zoologist' (1871, p. 2808):—"I discovered them on the margin of a large fresh-water pool in a marshy field, and, as they allowed of a near approach, had ample opportunities of observing their movements before putting them up. They presented a peculiar and interesting appearance as they marched about the grass with a very measured and stately walk, occasionally elevating the feathers on the top of the head into the form of a crest, much after the fashion of a Skylark, of gigantic [large, we should prefer to say] specimens of which bird their whole appearance was, strange to say, at a little distance, strikingly suggestive, the markings on the breast and general coloration of the plumage helping to complete the similarity. When they rose they uttered a peculiar note, rather weak and feeble for the size of the bird, and reminding me more of the note of the Curlew Sandpiper than that of any other species that I have heard. When flying one was mobbed and pursued by the Swallows which frequented the pond. They never flew to any great distance, and after the female was shot the male described a circle round her, and pitched a short distance off, rising and repeating the evolution as I approached within range." Mr. Rickards ascertained the

weight of the female to be $2\frac{3}{4}$ oz., and that of the male $3\frac{3}{4}$ oz. ; the female measured $8\frac{1}{4}$ in., and the male $9\frac{1}{4}$ in. This pair of Pectoral Sandpipers, still in beautiful condition, are now in our collection, and we also possess another, shot some years ago out of a flock of Purres on the Northumberland Coast (M. A. M.).

We know of no other Devonshire examples of this American species, with the exception of some mentioned by Bellamy (Nat. Hist. S. Devon, p. 323, note) as shot on the Tamar and preserved by Pincombe, but on the Scilly Isles two were seen, and one obtained, in May 1840; another, a few years later, occurred at Gyllyngvase East, near Falmouth; and in the month of September, 1870, Mr. Rodd received three from the Scilly Isles, which had been obtained on different days, and thought that this Sandpiper might be a more frequent autumn visitor to our shores than it is supposed to be, its inconspicuous plumage leading to its being overlooked. And since the publication of Mr. Rodd's book another Pectoral Sandpiper from the Scilly Isles has been recorded by Mr. Cornish, which was obtained in the autumn of 1883 (Zool. 1883, p. 495).

The Pectoral Sandpiper's nesting-habitat is unknown, and no collection possesses its eggs.

Bonaparte's Sandpiper. *Tringa fuscicollis*, Vieill.

An accidental visitor, of very rare occurrence.

This is another American species, bearing some resemblance to the Dunlin, from which it can, however, be at all times distinguished owing to its upper tail-coverts being white, which, in common with the Pectoral Sandpiper, has contrived as yet to maintain its nesting-quarters a secret from egg-collectors. It is seen commonly in flocks in the autumn on sands and mud-flats in America on its passage south from the extreme north, and its occurrences in this country are about equal in number to those of the preceding species. In North Devon four were shot on the Taw, near Instow, in November 1870, three were preserved, and one was too much injured to make into a specimen. There appears to have been a small immigration of this Sandpiper about that time, as Mr. Rodd records one which had been shot at the Lizard, as well as one from the Scilly Isles, and another was reported from Eastbourne. Mr. E. H. Rodd had in his collection two adults, male and female, which were shot near Hayle, in 1846. Although he calls them *Schinz's Sandpiper*, a name given by Brehm to a small race of the Dunlin, the full description he gives of their plumage makes it evident that his birds were *Bonaparte's Sandpiper*. In October 1854, he was able to mention another of these Sandpipers which had been shot at Tresco in the Scilly Isles.

Dunlin. *Tringa alpina*, Linn.

[Sanderling, Purre, Sea Lark, Summer Lark (*N. D.*.)]

Partially resident, probably breeding in small numbers on Dartmoor, where we saw a male in full plumage in June 1866, and Dr. E. Moore states that the nest has been found there (*Mag. Nat. Hist.* 1837, p. 322). The Dunlin frequents the estuaries of our larger rivers in considerable flocks nearly all the year round, but especially in spring and early autumn, when large numbers arrive from other parts. Flocks of small dark-coloured birds are then found feeding on the ooze high up the estuary of the Exe, but in winter the flocks, which are at that time composed of larger and lighter-coloured birds, keep to the sea-shore and more sandy banks near the mouth of the river. On the Kingsbridge estuary, according to Mr. E. A. S. Elliot, the larger grey form arrives in the autumn, and remains during the winter, leaving in spring about the middle or end of March: this form is seldom obtained in summer plumage, but when it does occur it is noticed in pairs, or in twos and threes in April; these are not birds that have remained all the winter, but are new comers. The smaller dark form arrives in May, in companies of from twelve to twenty, and remains some time; early in July this race again appears retaining their summer plumage, and birds may be obtained right on to October, but the greater portion have by that time left, to be replaced by the larger race from higher latitudes.

On one of the days in the last week of July we generally used to see little parties of half a dozen Dunlin, consisting of the two old birds and their brood, on the sands of the Barnstaple river, and they were then so tame that they would not rise on wing when approached, only running on in front. We have seen boys pelting them with stones, without their flying off. Standing quite still we have had them come close to our feet when feeding, and one actually probed the sand and mud which were clinging to the boots of a friend of ours as he was watching them by the water's edge. These little parties soon unite and form small flocks, and as the season advances the flocks combine, so that an enormous multitude may be seen on the mud-flats, and when these hundreds of birds rise on wing they present a beautiful sight as they skim along over the sands, at one instant presenting all their pure white underparts to view, and in the next, with a simultaneous twist, giving themselves a more sombre appearance as they disclose their darker backs and upper wing-coverts. We believe the greater number, if not all, of the Dunlin which are first seen in July and August on the coast continue their migration to the south, being seen again on their way northwards to their breeding-stations in April and May. They are then in their full summer livery, very bright russet above, with very black breast-markings, and are well-known to the Instow boatmen in North Devon by the name of "Summer Larks." The Dunlin we have with us in the winter belong to a larger race, with longer beaks, and have reached us from the far north, some of them, possibly, from North America. We know of no Dunlin actually nesting

anywhere in Devonshire at the present time, and the only place where the birds have, without any doubt, bred of recent years in the south-west of England is on the Bodmin Moors in Cornwall, not far from the Jamaica Inn, and near Dosmare Pool. Here several nests were found by Mr. Francis Rodd, of Trebartha, on July 8th, 1868. At the end of July 1876 we visited this locality, and found several Dunlin still on the ground, but were, of course, too late for the nests. In the West of Scotland, as well as on the Hebrides and other islands, Dunlin breed numerously in company with Golden Plover, and are called for this reason "Plover's pages." The Rev. Charles Swainson derives the word Dunlin from the dun colour (presumably) of the winter plumage.

A few specimens of the small race named *Tringa schinzi* by Brehm were killed at Plymouth in August 1876 (J. G., Zool. 1876, p. 5109).

Little Stint. *Tringa minuta*, Leisler.

A passing visitor, of occasional occurrence in May, and more frequently seen in August, September, and October. Flocks of considerable size are sometimes noticed both on the North and South Coast, wherever the shores are sandy. One killed at Plymouth, Dec. 9th, 1875, in full winter plumage is the only specimen known to have occurred so late in the year (Zool. 1876, p. 4784).

This minute species of Sandpiper makes its appearance on our shores early in the autumn from the extreme north of Europe. Its nesting-habitat was unknown until the summer of 1875, when Messrs. Seebohm and Harvie-Brown detected it breeding on the "*tundras*," or marshy flats, near the mouth of the Petchora river in North Russia—a wonderful summer home for our rarer *Tringæ*, as there was reason to suppose that, besides the Little Stint, other species, whose eggs are almost unknown to collectors, such as the Sanderling and Curlew Sandpiper, also nested either on the marshes or on some of the islands in the river. The eggs of the Little Stint are said to resemble those of the Dunlin in miniature. Besides the eggs of this small Sandpiper, Mr. Harvie-Brown also procured some of its young in down, and in Mr. Dresser's 'Birds of Europe' (vol. viii.) is a pretty illustration representing the young of the Little Stint, Temminck's Stint, and the Common Dunlin, all very much alike. We have so often encountered the Little Stint in September and October on the sands of the Barnstaple river, either in little flocks of ten or a dozen, or else singly or in pairs among flocks of Curlew Sandpipers and Dunlin, that we consider it almost a regular autumn visitor to North Devon. The Rev. Marcus Rickards shot one by the same pond on the Braunton Burrows where he obtained the Pectoral Sandpipers, and a pair on the mud-flat at West Appledore, and noticed others on the sands at Instow. We never saw any Little Stints after the middle of October, by which time they had all gone off further to the south, and one in the winter plumage obtained in the S.W. of England we have never seen, although we have specimens from Brighton. Nor have we ever seen a Little Stint in the spring

plumage from North Devon; those we have secured in the neighbourhood of Barnstaple in September have all been young birds in immature dress.

At Plymouth the Little Stint seems to be generally rare. Dr. E. Moore states that small flocks of five or six are occasionally observed on the Laira (Mag. Nat. Hist. 1837, p. 319). The Rev. W. S. Hore, with his friend Mr. Gutch, saw from forty to fifty on the Laira mud-banks, near Plymouth, in Oct. 1840, and shot ten or twelve of them (Yarrell, B. Birds, 2nd ed. iii. p. 67). Some occurred at the same place on 15th and 17th Sept. 1853 (B., MS. Notes).

One was shot at Thurlestone by Mr. Geo. Balkwill in 1876 (H. N., Zool. 1876, p. 5179); and several were obtained near Kingsbridge, at the end of August 1890 (R. P. N., *in litt.*). Mr. H. Nicholls has had three or four specimens (E. A. S. E.).

Dr. R. C. R. Jordan shot one on the Teign estuary (Trans. Devon. Assoc. iv. p. 711).

One in the A. M. M. was shot on the Exe on Sept. 30th, 1841, and Mr. Ross states that this was the only specimen he ever obtained, and that the Little Stint was scarce at that time, though formerly many were seen with Sanderlings and Purres (MS. Journ. iii. p. 10). There were some examples in Mr. Byne's collection said to have come from the Exe, and others were shot on Exmouth beach in 1887, and in the middle of October 1890.

When in company with the late Mr. W. Brodrick in May 1866, we saw many which had been shot near Budleigh Salterton, and were being hawked about for sale in the streets of that town.

One was obtained on the sand-flats at Barnstaple, August 22nd, 1856, and one or two flocks occurred there in the autumn of 1859 (M. A. M., Zool. 1857, p. 5347; 1859, p. 6762). Some on Northam Burrows, Sept. 29th, 1869, and a pair Sept. 14th, 1870 (M. S. C. R., Zool. 1870, pp. 2025, 2387).

Many occurred on the sands of the Taw in October 1874.

In Cornwall Mr. Rodd states that the Little Stint is occasionally seen both in the spring and autumn. Mr. Cecil Smith did not know of any Somerset Little Stint, neither do we, although it doubtless is sometimes to be met with on the sand-flats on the north coast.

In Dorsetshire it is recorded as a visitor both in spring and autumn, and is said to be not uncommon about Poole, where a flock of thirty was once noted.

The Little Stint has a great range. Large flocks are met with in the winter-time in Northern India, and Dr. Jerdon states that these little birds are considered excellent eating.

Temminck's Stint. *Tringa temmincki*, Leisler.

A casual visitor, of very rare occurrence. Col. Montagu's example of this species was killed in Devonshire (Yarrell, B. Birds, 2nd ed. iii. p. 71). Two were shot on June 28th, 1837, near Stonchouse Bridge, and were in Bolitho's collection when Dr. E. Moore wrote his Catalogue of the Wading Birds of Devonshire (Mag. Nat. Hist. 1837, p. 320).

About the same size as the preceding species, this small species of Sandpiper is easily to be known by the prevailing grey tints of its plumage. If the Little Stint may be regarded as a miniature Dunlin, Temminck's Stint might well be described as a small edition of the Common Sandpiper. It has some of its breeding-stations much further to the south than the Little Stint, and is a regular spring and autumn migrant to the south-

eastern coasts of England, but is only a very rare visitor to the south-western counties. It is fonder of inland streams and pools, by the banks of which it may be met with, than of the sands and oozes of the shore. In North Devon we have never secured an example, although we are certain that we have twice seen a Temminck's Stint when we have been Snipe-shooting in the winter-time by the side of a small pond on the Branton Burrows. On each occasion we were so close to the little bird that we nearly trod upon it, and failed to shoot it owing to the violence of the wind, which swept it off out of range before we could take any aim. One or two examples have been secured in the south of the county, and in Cornwall Mr. Rodd mentions the marsh at Marazion and the Scilly Islands as having produced one or two Temminck's Stints, adding that it is much rarer than the Little Stint. In Somerset the only one Mr. Cecil Smith knew of at the time he wrote his book was the "Little Sandpiper" Col. Montagu received in Sept. 1805, from his friend Mr. Anstice of Bridgwater, who shot four of this Stint one day at the mouth of the river Brue, and sent one for the Colonel's collection. In the 'Zoologist' for 1875, p. 4334, he was able to record another which had been shot on the 14th November in the previous year on North Curry moor. From the description Col. Montagu gives of his bird it was evidently a Temminck's Stint, as was also another which was shot on the south coast of Devon on a salt-marsh near the sea in November, and brought to him, which was supposed to have been a Jack Snipe when flushed. Col. Montagu says this small Sandpiper "is about the size of a Hedge-Sparrow, the length between five and six inches."

Temminck's Stint has been shot at Weymouth in September, according to Mr. Mansel-Pleydell, who says it is "by no means common" in Dorset. All our specimens came from the south-eastern counties, and one we have in perfect summer plumage, when there is a good deal of dark brown with pale rufous edgings to the feathers upon the back, was shot at Lewes.

The American Stint. *Tringa minutilla*, Vieill.

An accidental visitor, of extremely rare occurrence.

This small species is much darker in its plumage than the two Stints we have already described, and is a very rare straggler to this country from the New World; the only two which have been obtained have both come from the south-western counties—one from the north of Devon, and the other from Cornwall. The Rev. Marcus Rickards, Vicar of Twigworth, Gloucester, who was extremely fortunate in meeting with rare species of Sandpipers in the years when he was accustomed to shoot at Instow and Northam, secured the first of these two American Stints on the 22nd Sept. 1869, on the salt-marsh adjoining the Northam Burrows. It was solitary, was very wild, and had been observed for several days before an opportunity occurred to shoot it. "When it rose it always repeated a short hurried note, similar to that of the two other species, though perhaps rather shriller, and more frequently reiterated. Its flight was strong and

rapid for so small a bird, and struck me as being something like that of the Common Sandpiper, which bird (except as regards the vibratory motion of the body peculiar to that species) it somewhat resembled in its movements when on the ground. It always flew away across the water out of sight and at a great height, but it invariably returned to the same spot where I had first observed it" (Zool. 1869, p. 1920; 1870, p. 2025). We have frequently seen and examined this specimen of the American Stint, which we believe to be now in the collection of the Hon. W. Rothschild. Mr. Rickards states that south-westerly gales had been prevailing about the time he shot the bird. Mr. Gould supposed this specimen to be *Tringa wilsonii*, but it was identified as *T. minutilla* by Mr. Harting (Handbook of B. Birds, p. 143). The Cornish example was shot by Mr. Vingoe, the well-known bird-stuffer of Penzance, in Mount's Bay, on October 10th, 1853. It was solitary when found on a piece of wet grass-land adjoining the sea-shore, and rose without any note, and was at once submitted to Mr. Rodd, who has carefully described the points of difference it presents from the other two species of Stint.

The American Stint breeds plentifully in Labrador, where it goes by the name of "Peep," and is the *smallest* of the three species of Stint which have been met with in this kingdom.

Curlew Sandpiper. *Tringa subarquata* (Güld.).

[Pigmy Curlew.]

A passing visitor in spring and autumn, of frequent occurrence at the latter season on the mud-banks in the estuaries of our larger rivers and on the sandy shores of the sea-coast, both in the north and south of the county. It is not uncommon in September in the Exe estuary, and is, or was, especially numerous in that of the Taw.

Next to the Dunlin this elegant Sandpiper is the most numerous species in the Barnstaple river in the autumn, where a few arrive at the end of July and during August, while numbers appear in September, and by the middle of October all have left to pursue their way further to the south. When feeding on the sands in company with other *Tringa*, the Curlew Sandpiper may be recognized by its longer legs and more upright carriage; and when it takes wing its white upper tail-coverts at once make its presence apparent. On the West-Appledore flats we have seen flocks of a hundred or more of these birds; and the Rev. Marcus Rickards has informed us of a great concourse he once met in the same locality, when he thought there must have been well-nigh a thousand assembled together. One of these Sandpipers shot by us on the Taw, close to Barnstaple, on August 14th, 1856, was in almost complete summer plumage, and others we have obtained at the beginning of September had still patches of red upon the breast, with rufous margins to the scapularies; but by far the greater number seen in the autumn were birds of the year, with their underparts of a buffy white, and their upper parts grey with semicircular white edgings to the feathers. Mr. Spencer Heaven one year shot a pair

on Lundy Island in June in the bright red summer dress, in which plumage Col. Mathew has seen a few at the end of May by the side of the Bude reservoir. The Curlew Sandpiper is rarely obtained in the West of England in the winter plumage, and the only specimen we have ever been able to secure was shot on a moor close to Taunton, a singular locality to meet with one. It was solitary when it was observed, and had the underparts pure white, the upper parts were ash-grey, chequered on the shoulders and upper wing-coverts with spots of white, giving a hoary appearance, somewhat resembling the summer plumage of the Wood-Sandpiper.

Specimens in full breeding-plumage have been frequently obtained. Two are in the A. M. M. shot on the Exe on September 18th, 1841, and in May 1867. Two in summer plumage, shot on the estuary of the Exe, were in Mr. Byne's collection: one of them was killed in 1870. Two or three have been obtained in breeding-plumage at Plymouth, where this species is not very rare in September and October, and is met with occasionally throughout the winter in small numbers (R. A. J., 'Naturalist,' 1851, pp. 44, 59). The Curlew Sandpiper was first obtained in the Kingsbridge district in 1875; and in 1878 many occurred on the estuary there and at Bantam. Since then none were met with till August 1890, when it was unusually plentiful on the Kingsbridge estuary, and continued so up to the middle of October (E. A. S. E., MS. Notes).

In Cornwall, and also in Dorsetshire, the Curlew Sandpiper is not uncommon, being frequently obtained among flocks of Dunlin in the autumn; and the same may be stated respecting it on the north coast of Somerset, in which county our experience does not accord with Mr. Cecil Smith's statement that this Sandpiper is only a winter visitor, as we have never seen but one example of it in the winter plumage—the one we have already described.

The Curlew Sandpiper doubtless breeds in the north of Russia and in the far north in Asia; but up to the present time its nesting-habits and its eggs are quite unknown.

Purple Sandpiper. *Tringa striata*, Linn.

A winter visitor in small parties, frequenting the rocky parts of the south coast, arriving annually in October or the beginning of November, and remaining until rather late in the spring, though Mr. Gatecombe never met with a specimen in breeding-plumage (Zool. 1882, p. 457). It is rare on the north coast.

The Purple Sandpiper is a winter visitor to our coasts from the north, preferring a rocky to a sandy shore, and throughout our south-west counties it is not uncommon in places suited to its habits, and may be seen running about among the seaweed near the water's edge in search of marine insects. On the sandy and muddy estuaries of the North Devon rivers it is only occasionally met with among the Dunlin and other *Tringa*; and the Rev. Marcus Rickards has informed us that he once came across a small flock on the Northam Burrows. We had one which was shot as it rose, like a Snipe, on a salt-marsh close to Barnstaple.

At Plymouth it is common amongst the Purres in winter, and has been shot there

in May (E. M., Mag. Nat. Hist. 1837). One there in November 1861; many in the winter of 1865-66, Mr. Gatcombe meeting with several flocks on the Breakwater; four March 24th, 1866; two on the rocks at Longroom, November 2nd, 1871; three seen on the rocks under Plymouth Hoe, December 2nd, 1872; some seen February 25th, 1873; one shot on the Breakwater, October 23rd, 1874; rather plentiful on the rocky coast in 1875; one killed out of a small flock on the rocks of Drake's Island, March 3rd, 1882 (J. G., Zool. 1866, p. 97; 1872, p. 2984; 1873, p. 3443; 1874, p. 4253; 1875, p. 4719; 1876, p. 4783; 1882, p. 451; 'Field' for Nov. 25th, 1865; and MS. Notes). Several were shot on Kingsbridge estuary, January 7th, 1867. Some are met with every autumn about the rocks at Prawle, according to Sir H. Hewett; five shot there in November 1886 (E. A. S. E., MS. Notes). Mr. Elliot has seen flocks as late as May outside Kingsbridge Harbour.

Several were killed at Exmouth, November 22nd, 1866 (C. S., Zool. 1867, p. 562). One shot on the Exe, October 27th, 1870. Some on Dawlish Warren, November 1872 ('Field' for Nov. 16th, 1872). One at Exmouth in the winter of 1887-88. There were several specimens from the Exe in Mr. Byne's collection.

The Purple Sandpiper is an occasional visitor to Lundy Island (Trans. Devon. Assoc. viii. p. 309).

On the Cornish coast it is common, Dr. Bullmore declaring that it is the most numerous of all the Sandpipers in the neighbourhood of Falmouth, and it is not rare on the Somerset and Dorset shores. This species takes its name from its winter plumage of purplish grey, and when the birds are living or have only been recently shot there is a pretty gloss upon the feathers which quickly fades in stuffed specimens. In the summer plumage the feathers on the back and scapulars are edged with yellowish rufous, and in this dress the birds are not often obtained in the South of England, but we have seen one from Looe in the Truro Museum.

The Purple Sandpiper may, perhaps, have nested occasionally on the Farne Islands off the Northumberland coast, and on the Hebrides and Shetland Islands; but its summer home is much further to the north, in Iceland, Greenland, &c., and it is also a common species in North America.

Knot. *Tringa canutus*, Linn.

[Silver Plover, on the Exe.]

A passing visitor in spring and autumn, most numerous at the latter season, when flocks visit our estuaries from August to October, and occasionally remain throughout the winter.

This very interesting Sandpiper is chiefly seen on our Devonshire shores as an autumn migrant, remaining a short time, and then leaving for the south. It is rare to see one either in the rich red dress assumed in spring or in the grey winter plumage in the south-western counties, while along the eastern coast it is almost equally numerous both in spring and autumn, remaining all the winter, with great reinforcements to its numbers in severe weather. On the sands of the North Devon estuaries the Knot usually arrives about 20th August, and by the end of September it is useless to go in search of them, as by that time the flocks will all have departed. When they first arrive the birds are singularly

fearless; flying low over the water, they will, with misplaced confidence, settle on the ooze at the gunner's feet, and when fired at will hardly trouble to rise on wing to seek safety. As the flocks are noticed crossing the sands it is easy, by running, to intercept their line of flight; there will be no change made in its direction, and the heedless birds will advance securely to their fate. These autumn flocks appear to be composed chiefly of immature birds in a silvery-grey plumage with buff-coloured breast and grey backs, with semicircular edgings of white to the feathers; the few old birds among them may be distinguished by the faint tinge of salmon-colour still remaining on the breast. Being very good birds for the table, Knots are greatly persecuted by the shore-shooters, and their numbers become less every year on our North Devon sands.

The Knot seeks very high latitudes for its breeding-stations, and has been closely associated with the search for the North-west Passage. It was known that this Sandpiper placed its nest in some regions further to the north than had yet been explored, and it was certain that wherever the bird could breed there must be open water, land on which it could set its feet, and plenty of food supplied either by the water or by the land, or by both, for the maintenance of itself and its offspring. On its way north the bird passed Iceland and Greenland; and it would hardly leave those countries, which offer a breeding-station to countless hordes of wild-fowl, in preference for another more sterile and worse off as regards supply of food. The inference was, there was still a country to be discovered near to the Pole with an open sea and comparatively genial climate; and it was mainly through reliance on this argument that the 'Discovery' and the 'Alert' were despatched to the far north in the summer of 1875. The expedition failed to discover this mild circumpolar region; but on some islands, in very nearly the highest latitude it was able to attain, some Knots were detected breeding by Capt. Feilden, and, although no eggs were obtained, some young in down were brought back to England, which may now be seen in the Bird Gallery at the South Kensington Natural-History Museum—an interesting trophy from the Pole. But the Knot must occasionally nest in lower latitudes; for Mr. Booth ('Field,' Dec. 16th, 1876) saw little flocks of young Knots on the Dornoch Firth, in Sutherlandshire, as early as 8th July, and it seems impossible that they could have been reared near the Pole, where everything would be frozen against the parent birds until the middle of June, and there would be no time for young Knots to be hatched and able to fly until the beginning of August, and it is therefore natural to suppose that those seen by Mr. Booth must have come from a nesting-station closer at hand, perhaps somewhere on the Finnish or North Russian coast. And Dr. Saxby states, in his 'Birds of Shetland,' that he has little doubt that the Knot occasionally breeds in the northern districts of those islands, as he has met with young ones so weak upon the wing that it seemed impossible for them to have crossed the sea—"indeed, they rather fluttered than flew."

According to Mr. Gatecombe, large flocks of Knots sometimes remain throughout the winter at Plymouth (J. G., Zool. 1873, pp. 3468, 3784; 1875, p. 4373; 1876, p. 5490; 1879, pp. 114, 418); one occurred on the Exe in November 1868, and a small flock in December 1888.

Specimens in breeding-plumage are met with occasionally. One was shot out of a flock of ten on the Exe, May 27th, 1844 (F. W. L. R., MS. iv. p. 116). This bird is now in the A. M. M. Another occurred on the Exe, August 11th, 1877 (W. D'U., Zool. 1877, p. 448); a male at Bantham about 1860; a female on the Kingsbridge estuary in May 1876 (R. P. N., MS. Notes); and two at Plymouth September 16th, 1873 (Zool. 1873, p. 3784). There was a male from Devon in the National Collection which was presented by Mr. Comyns. A Knot obtained at Plymouth on May 5th, 1878, was still in winter plumage (Zool. 1879, p. 418).

Knots are abundant on the Kingsbridge estuary in autumn, and a few occur in winter and spring. Mr. Henry Nicholls shot a white specimen there, September 16th, 1865, which is now in his fine collection. It was in company with two other birds in the ordinary plumage, which were also shot (H. N., Zool. 1866, p. 526; and MS. Notes). On the Exe estuary the Knot is rarely seen except in autumn, arriving in September and remaining for about three weeks.

Mr. Mansel-Pleydell states that a few Knots occasionally remain during the winter in the neighbourhood of Poole Harbour; and Mr. Cecil Smith considered this bird a winter visitor to the Somersetshire coast.

Ruff. *Machetes pugnax* (Linn.).

A casual visitor, of occasional occurrence, generally in autumn or winter, and very rarely in spring. "On 17th 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" (Montagu, Orn. Dict., Suppl.). Excepting this specimen, two full-plumaged males and a female said to have been shot on Aveton Gifford Marshes, and now in the collection of the late Mr. J. Elliot of Kingsbridge, and a Ruff and Reeve at Plymouth May 9th, 1867, all that have been obtained in South Devon were immature birds or adults in winter plumage. A male bird was shot on Dartmoor in January 1867, and another there in October 1878 (J. G., MS. Notes; Zool. 1879, p. 113), but it is on the estuaries or near the sea-coast that the Ruff is most frequently met with.

At Plymouth one occurred December 8th, 1854; two May 9th, 1867 (B., MS. Notes). One was shot at Slapton Ley by Rev. Mr. Holdsworth, December 27th, 1808 (Montagu, Orn. Dict., Suppl.). Two Ruffs and a Reeve in winter plumage, obtained near Kingsbridge, are in Mr. Henry Nicholls's collection.

Montagu mentions one shot near Exeter "lately" (1813). The late Mr. Ross states that when in September 1844 a Reeve occurred on the Exe it was quite an unknown bird there (MS. Journ. iv. p. 121), but since then a good many have been obtained from time to time. Several specimens in the A. M. M. were killed on the Exe in the winter of 1847-48 (R. C.). Several were shot in August and September 1870; one in September 1889; and one at Exmouth, December 1890. There were Devon-killed specimens in Mr. Byne's collection, probably from the Exe.

One was killed on Braunton Burrows in the winter about 1856 (M. A. M., Zool. 1858, p. 6264). The Ruff has also been shot near Clovelly, and an immature bird was secured near Barnstaple in September 1865 (G. F. M., 'Naturalist,' 1866, p. 360). A Ruff and Reeve, September 15th, 1870, on Braunton Burrows (M. S. C. R., Zool. 1870, p. 2387), and one there in November 1889 (Zool. 1890, p. 108).

In former days the Ruff was a spring visitor in some numbers to the fen-districts of England, nesting and passing the summer in several of the Eastern Counties ; but at the present time an occasional nest is all that is to be found in Lincolnshire and Norfolk, and in Devonshire and in the West of the kingdom generally the Ruff is seen only at uncertain intervals in spring and autumn. Col. Montagu visited Lincolnshire for the purpose of acquiring all the information he could respecting the habits of these birds, and the methods of capturing and fattening them adopted by the fen-men, and took several back with him for his aviaries at Kingsbridge. He has described the battles the Ruffs wage in the spring at the breeding-season, and the "hills" or mounds which the birds selected for their encounters, where they contended with one another like game-cocks, the combatants rarely doing any injury to each other, and how they were netted around these "hills." We have once or twice obtained a Ruff in the autumn in North Devon ; one, which flew towards us and alighted by a small drain on the Northam Burrows, looked very like a Bartram's Sandpiper as it was running on the ground, and as the birds have yellow legs we have sometimes had them sent to us for the American Yellowshank. We have seen Ruffs in Somerset near Weston-super-Mare, one day encountering a small flock in September ; and in Col. Montagu's day they were not uncommon around Bridgwater, Somerset being given as one of the English counties in which they formerly nested. In its curious spring plumage, in which no two males will be found with the colours of their ruffs identical, this Sandpiper is very rare in the West of England, although some were shot some years ago near Taunton, and Mr. Rodd states that he never knew of one in this dress having been secured in Cornwall.

Sanderling. *Calidris arenaria* (Linn.).

A winter visitor, of irregular appearance, sometimes in vast flocks, to some of our estuaries, arriving in August and remaining until March. The late Charles Hall, of Topsham, with whom we used to go gunning on the Exe estuary, once killed seventy in two shots out of a large flock on the mud-banks below Topsham.

To be readily distinguished from the other smaller sand-birds through the absence of a hind toe, the Sanderling is not a numerous species in general on the Devonshire coasts. We have seen little parties as early as 2nd August on the Barnstaple river, having returned by then from their nesting-stations in very high latitudes, the old birds still retaining rufous margins to some of the feathers ; but the flocks seen later on in the autumn are composed chiefly of young birds in their first plumage, in which the colours are yellowish or greenish grey, black, and white. Some are occasionally obtained in the spring in the "Ruddy Plover" dress of the older ornithologists, and some in the full winter plumage, but the birds seldom remain with us long enough for its complete assumption. Authenticated eggs of the Sanderling are rare in collections. Capt. H. W. Feilden took a nest on 24th June, 1876, in latitude 82° 33' N., containing two eggs,

which Mr. Dresser describes as "miniature Curlew's eggs, of a pale colour, and of about the size of the egg of the Wood-Sandpiper" ('Birds of Europe,' vol. viii. p. 108).

Although often plentiful on the estuary of the Exe, and also at Axmouth, the Sanderling is generally scarce on the shores of Torbay (F. Pershouse, Trans. Devon. Assoc. vol. viii. p. 288) and at Plymouth (J. G., Zool. 1873, p. 3393). It is common in autumn on the coast between Bolt Tail and Avonmouth (E. A. S. E., *in litt.*), and is sometimes numerous on the sand-flats near Barnstaple, but is not a regular winter visitor to the north of the county (M. A. M., Zool. 1859, p. 6762).

Sanderlings sometimes occur in spring and summer in breeding-plumage. One on the Exe, June 8th, 1844 (F. W. L. R.), and one May 19th, 1850 (R. C.). Both these specimens are in the A. M. M. Mr. Cecil Smith shot eight at one shot at Exmouth on May 7th, 1863, which were in all stages of plumage (MS. Notes); and one was seen in breeding-dress and very tame feeding along the margin of Slapton Ley (J. H. G., Zool. 1871, p. 2679). Flocks were met with in spring plumage in May 1887 and 1890 on the sands at Thurlestone (E. A. S. E., MS. Notes).

This species is frequently confounded with the Dunlin, which is also often called "Sanderling," and probably from this cause it has been reported from Dartmoor and has even been stated to breed there.

Buff-breasted Sandpiper. *Tryngites rufescens* (Vieill.).

An accidental visitor, of extremely rare occurrence.

This pretty wanderer from America is said to be a frequenter of dry plains, where it feeds upon grasshoppers and other insects. Like many other Sandpipers it nests in the Arctic Regions, and the only eggs of it known are those in the Smithsonian Institution, which were taken by Mr. McFarlane on the banks of the Anderson river. The Buff-breasted Sandpiper is described as very tame and confiding. It may always be known by the beautiful mottled band drawn across the under surface of the wings. The only undoubted Devonshire example of this rare species which we have handled is the one which is now in the Taunton Castle Museum, which was presented to the late Dr. Woodforde of Taunton by Mr. S. De B. Heaven, who shot it on Lundy Island in the autumn of 1858 (H. Saunders, Yarrell's 'British Birds,' 4th ed. iii. p. 437).

In Cornwall the Buff-breasted Sandpiper has been obtained twice: the first was shot on the sands between Marazion and Penzance, September 3rd, 1846, while flying with Dunlins and Ringed Plovers: and the second on September 8th, 1860, by a pool on some high moor-ground near Chun Castle, Morvah. Then, in September 1870, a third example was obtained on St. Bryher's, one of the Scilly Islands, which was also noticed by the margin of a pool (Rodd's 'Birds of Cornwall,' p. 100).

In August 1851 a bird, supposed by the late Mr. F. W. L. Ross to belong to this species, was shot on the Exe, and was often seen by us in his possession after it had been set up, with its wings raised so as to show the under wing-coverts: but when his collection was handed over to the Albert Memorial Museum in 1865, this bird was not forthcoming—at any rate there was no specimen of the Buff-breasted Sandpiper in the collec-

tion. It is unfortunate that this specimen should have disappeared, as it is possible it was incorrectly identified, and it has been recorded on our authority in Harting's 'Handbook of British Birds,' p. 138, and in Yarrell's 'British Birds,' 4th ed. iii. p. 437. In the 'Zoologist' for 1857, p. 5791, Mr. Henry Nicholls records a female specimen obtained in September of that year near Kingsbridge, but Mr. J. H. Gurney believes it to have been a young Ruff (Harting's 'Handbook of British Birds,' p. 138). There is a Buff-breasted Sandpiper in the collection of birds formed by the Rev. Alau Furneaux, of St. Germans, Cornwall, presented to him by Capt. Creyke, R.N., and now in the Plymouth Institution, but we have not been able to ascertain where it was obtained.

[**Bartram's Sandpiper.** *Actiturus longicauda* (Bechstein).]

This species, somewhat larger than the preceding one, is also a chance migrant to this country from America, and is very similar in its habits, but differs in being very numerous, sometimes being seen in Texas in flocks of thousands. It differs again from the Buff-breasted Sandpiper in breeding throughout the United States, so that its beautiful eggs, which closely resemble those of the Woodcock, are common in collections. American sportsmen consider Bartram's Sandpiper a fine game-bird, and it is known to them by various names, such as Upland Plover and Prairie Pigeon, and Dr. Coues states that it "is best shot from a carriage." We have never seen a Devonshire example of this Sandpiper, but detected one, its possessor not knowing what it was, in Dr. Woodforde's collection at Taunton, which had been shot many years before on the Bridgwater river at Combwitch. This bird is now, with the rest of Dr. Woodforde's collection, in the Taunton Castle Museum, and is in a greyer plumage than any other example of Bartram's Sandpiper we have examined. In Cornwall, a county singularly rich in rare Sandpipers, two examples have been recorded. The first was recognized and purchased November 13th, 1865, by Dr. Bullmore, hanging up in Webber's game-shop at Falmouth. It had been flushed by a farmer's son in a turnip-field at Mullion. "It rose singly, uttering a short shrill scream, flew over the hedge, and dropped into a ditch by the side of a contiguous road. On the approach of its pursuer it again flushed, alighting this time in the middle of a lay field, where it was shot. It was sent, in company with Woodcocks and Snipes, to the game-shop, from which place I was fortunate enough to rescue it." (Dr. Bullmore, 'Cornish Fauna.') This specimen weighed a little over 6 oz. A second Cornish Bartram's Sandpiper was shot at St. Keverne, near the Lizard, in October 1883, and recorded in the 'Zoologist' for that year, p. 495, by Mr. Thomas Cornish of Penzance. This bird is now in the possession of Dr. H. S. Leverton, of 68 Lemon Street, Truro, whose brother shot it, and in whose house it was examined by Mr. H. E. Dresser, who describes it as being very pale-coloured in its plumage (H. E. Dresser, Zool. 1885, p. 232). Bartram's Sandpiper may easily be distinguished

from a young Ruff, the only bird with which it might possibly be confounded, by the extreme length of its tail, which has given it its specific name of *longicauda*.]

Common Sandpiper. *Tringoides hypoleucus* (Linn.).

[Summer Snipe, Otterling (on the Exe).]

A summer migrant, to be met with both in the spring and early autumn in small flocks on the banks of rivers and streams in the neighbourhood of the sea. It arrives in April, the earliest date observed by ourselves being the 7th of that month in 1872, and departs about the middle of October. A few stragglers sometimes remain until November and December on the estuaries of the Exe and Dart (G. F. M., Zool. 1875, pp. 4327, 4328). Soon after their first arrival the flocks disappear from the estuaries until the end of June or the beginning of July, as observed by ourselves on the Exe, and Mr. E. A. S. Elliot at Kingsbridge; but the Rev. R. A. Julian and Mr. Gatcombe state that they do not return to the coast near Plymouth from their breeding-places on the moorlands until the end of August ('Naturalist,' 1851, p. 88, and Zool. 1882, p. 64), though some were seen at the end of July 1882 (Zool. 1882, p. 49). The Common Sandpiper is seen in pairs on the Okement, Avon, and other Dartmoor streams in summer, and the nest has frequently been found. The eggs are laid in May.

About the middle of April this well-known bird makes its appearance in pairs by most of our inland West Country streams at certain favourite places, remaining for a few days, and then pursuing its course to its nesting-stations on the moors. Here it at once proceeds to engage itself with its nest, and continues all the summer until the young are strong on wing, and then, towards the end of July, it leaves the moors and descends to the creeks and shores of tidal estuaries, where it stays until the end of September in little flocks composed of two or three broods. By the beginning of October all but one or two will have left for the south. The angler who fishes moorland streams cannot fail to notice this graceful Sandpiper as it flies before him with its shrill whistle, settling on a stone in midstream, swaying its body to and fro, and then rising again on his approach. Should the nest be situated near the water great will be the excitement of the birds as the fisherman draws near to it; they will fly round him in repeated circles and will be very clamorous until he is once more at a safe distance from their treasures. We have found the nest with young birds in it at Simonsbath, on Exmoor, and have had one of the old Sandpipers come and settle close to our hand as we were stooping down looking at it. We were contented with a brief examination, and then hastened away to set the anxious birds at rest. When fishing on the Barle we were once close to a Common Sandpiper, which did not see us, as a high furze bush by the edge of the water screened us effectually, when the bird rose from the shingle and flew up a few feet, twittering a little song, and then slowly descended again with outstretched wings, in the

manner of a Titlark. The Common Sandpiper, the Grey Wagtail, and the Dipper are all dear to us from their association with many a moorland stream in the delightful West Country on which we have plied our fly-rod. When shot at and wounded this Sandpiper swims and dives readily, and is difficult to capture.

Green Sandpiper. *Helodromas ochropus* (Linn.).

A passing visitor, occurring sparingly, and generally in autumn, *i. e.* August to October. It is probably to some extent a resident, as three, old and young, were shot on the Exe Marshes, August 5th, 1839 (F. W. L. R., MS. Journ. ii. p. 34), and in 1868 a flock remained on the Exe estuary all the summer. There is hardly a month in the year in which we have failed to notice this beautiful Sandpiper in the South-western Counties. Some are undoubtedly with us during the winter, as we have frequently seen them in December, January, and February, and a pair or two have, with little doubt, nested occasionally in the neighbourhood of our least disturbed streams. With the single exception that this species does not ascend to the moors at the nesting-season its year's history closely follows that of the Common Sandpiper, for as soon as the young can fly they also are conducted by the old birds to salt-marshes, and to the edges of small ponds and creeks near the tideway, where they appear at the end of July or at the beginning of August, and have occurred to us when the young have been such feeble flyers that it has been evident that they could not have come from any great distance. There is a small stream which runs down from Bratton Fleming, and joins the Yeo some five miles to the east of Barnstaple, by whose banks one spring we constantly saw a pair of Green Sandpipers, and several times searched diligently for their nest in the long rushy meadow where we invariably flushed them. This was many years ago, before the singular nesting-habits of this species had been discovered, and had we only been aware of them we feel confident we might have secured the eggs of this pair of Sandpipers. At the bottom of the meadow where we saw them there was a small plantation which came down to the edge of the stream, and when we disturbed the birds they generally rose rather high into the air, and, taking this direction, were lost to view as they flew over the trees. These were chiefly firs, and in an old pigeon's nest in one of them were doubtless the eggs we had searched for in vain.

When flushed the Green Sandpiper utters a shrill piping cry, and flies off in a succession of abrupt zigzags, its white tail, boldly barred with black, being a conspicuous object. It is a shy bird, and could not be approached, if it were not for the shelter afforded by the rushes and aquatic herbage at the edges of the small pools it frequents, in which, being partly concealed itself, it fails to perceive the advancing sportsman. But, unless one is wanted as a specimen, the Green Sandpiper is hardly worth shooting, as the flesh is dark and has a curious musky flavour, rendering it quite unpalatable.

An immature bird was obtained at the mouth of the River Plym, July 31st, 1851 (R. A. J., 'Naturalist,' 1851, p. 59). One occurred at Plymouth, July 30th, 1858 (B., MS. Notes). Three were seen, August 3rd, 1874, between Instow and Fremington, two being young birds (J. G., Zool. 1874, p. 4254). A pair were shot in May 1884, which frequented the pond at Bearscombe, near Kingsbridge, and one was seen near Loddiswell Bridge in May 1886 (E. A. S. E., MS. Notes). The Green Sandpiper also sometimes occurs in winter. A young male was shot on the Exe, November 2nd, 1863; one near Plymouth early in January 1881 (J. G., Zool. 1881, p. 195); one at Buckland, near Kingsbridge, January 15th, 1887 (E. A. S. E.); and three were seen at Exmouth, December 21st, 1890.

Dr. E. Moore and Bellamy considered it rare and a winter visitor. Turton and Kingston say: "rare, found occasionally on the banks of some of the Dartmoor streams from September to April." Mr. Ross states that it was "very rare on the Exe." Mr. Cecil Smith considered it a common bird in Devon and partially resident (*in litt.*). At Kingsbridge it occurs occasionally in spring, autumn, and winter (R. P. N. and E. A. S. E., MS. Notes).

It has been frequently obtained at Plymouth, on the marshy ground skirting Bigbury, Start, and Tor Bays, and on the estuary of the Exe on the south coast; and on salt-marshes near the shores of Barnstaple Bay and the estuary of the Taw on the north coast. Inland it has occurred at North Buckland (J. C. B., Nat. Hist. S. Devon, p. 212); near Ivybridge (Zool. 1885, p. 378); Wonford, near Exeter; and near Barnstaple (M. S. C. R., Zool. 1871, p. 2810).

We used to find the Green Sandpiper common in the neighbourhood of Weston-super-Mare in Somerset, meeting little parties consisting of old birds and young, by the side of rushy pools bordering on the Axe, at the end of July, and in August and September.

Wood-Sandpiper. *Totanus glareola* (Gm.).

A casual visitor, of rare occurrence. It was first discovered as a British bird by Col. Montagu, and there used to be a female specimen in the British Museum from his collection, which was shot on the south coast of Devon early in the month of August (Orn. Diet.). Dr. Tucker includes it in his list of birds found near Ashburton, and Turton and Kingston speak of its being found on the Dart.

Although this Sandpiper is a widely distributed species and nests commonly in Holland, it is known in this country only as an occasional visitant, rarely seen in the spring, and chiefly appearing in the autumn. There is one instance of its nest and eggs having been taken at Prestwich Car, in the county of Durham. We know of but three occurrences in North Devon, all of them of young birds; one was to ourselves on a salt-marsh close to Barnstaple, August 11th, 1859, another was shot by the Rev. Marcus Rickards on the Braunton Burrows, on the same day that he obtained the Pectoral Sandpipers and very near the same spot, in Sept. 1871, and the third was secured near Barnstaple in August 1877. In South Devon the Wood-Sandpiper is equally rare, and Mr. Gatecombe had never seen one that had been shot in the neighbourhood of Plymouth. However, in the Gallery of British Birds in the Natural History Museum at South Kensington a very good example of the Wood-Sandpiper may be seen which is labelled "Torquay," and was presented by Mr. Coningham.

Mr. R. P. Nicholls has never seen a Wood-Sandpiper at Kingsbridge,

and we know of no instance of its occurrence on the estuary of the Exe. There is an immature specimen in the Torquay Museum which is labelled "Slapton Lea;" it is old and rather faded.

In Cornwall the Wood-Sandpiper is more often obtained, as many as seven having been shot in one day in the month of August in the Land's End marshes, and others have been met with in April, May, June, and December, Mr. Rodd believing that those shot in the spring might possibly have nested had they been undisturbed. In Dorset, according to Mr. Mansel-Pleydell, this Sandpiper is rare. Mr. Cecil Smith knew of no Somerset Wood-Sandpiper at the time he published his book, but procured two subsequently, which were shot close to Taunton. These birds are before us as we write; for, having seen them both in the flesh, we were sufficiently interested in them to purchase the case at the sale of Mr. Cecil Smith's collection. We look regretfully at the one in complete summer plumage, which was shot at Chedden on 9th May, 1870, as it might have had a mate, and possibly a nest, at the time it was slaughtered. The other is an example of a young bird in immature plumage.

Our first eggs of the Wood-Sandpiper were presented to us by our kind old friend Mr. Frederick Bond, at whose house in St. John's Wood it was our privilege to spend many a happy half-holiday in our schoolboy days. We happened to be there one day when Baker of Trumpington Street, Cambridge, arrived from Holland, where he had been collecting eggs, with a large basket full of the beautiful eggs of the Melodious Willow Warbler, Little Bittern, Wood-Sandpiper, &c., and were presented with one or two of each, to our great delight.

The Wood-Sandpiper places its nest upon the ground in marshes, and, according to Mr. Dresser, is fond of the society of cattle. The Rev. Marcus Rickards has remarked that there is the same musky smell, perhaps more highly intensified, observable in the body of the Wood-Sandpiper as may be detected in that of the Green Sandpiper. Respecting the example of this species shot by him on Braunton Burrows, Mr. Rickards has informed us that it rose with a loud startling whistle, and then dropped like a stone into some reeds, where he watched it standing and vibrating its tail.

[*Observation.*—Two examples of a common American Sandpiper, the Solitary Sandpiper, *Totanus solitarius* (Wilson), have been obtained in recent years in the extreme S.W. of the kingdom—one on the Scilly Isles, on 21st September, 1881, which is now in the collection of Mr. Dorien-Smith, of Tresco Abbey; and the other on a marsh near Marazion, towards the end of January 1885; both were recorded in the 'Zoologist' at the time by Mr. Thomas Cornish, of Penzance (*Zool.* 1882, p. 432, 1885, p. 232). Only one other instance of this species had been previously known from the Clyde some few years before. The Solitary Tattler, to give it its American name, closely resembles our Wood-Sandpiper, but differs from it in having olive-brown instead of white upper tail-coverts. It makes its appearance in the United States in the spring and fall, and some are said to breed. Dr. Coues has given an amusing

account of its trick of constantly bowing its head, and of standing motionless in the water when its hunger has been satisfied ('Birds of North-West,' p. 500).]

Redshank. *Totanus calidris* (Linn.).

[Pill-cock : *N.D.*]

A passing visitor, principally in autumn, when flocks sometimes frequent our estuaries for a few weeks in August and September. Dr. E. Moore records specimens shot on Kenton (Dawlish) Warren in June 1828 (Trans. Plym. Inst. 1830). Mr. Gatecombe mentions seeing one flying up the Tamar on July 12th, 1876 (Zool. 1876, p. 5109); and Mr. E. Elliot shot one on the 27th of that month in 1889 on the Kingsbridge estuary. Single birds occasionally remain throughout the winter on the Exe, and Mr. Gatecombe considered the Redshank had become a regular winter resident on the Plymouth estuaries (Zool. 1875, p. 4373; 1877, p. 278; 1880, p. 247; 1883, p. 166; 1884, p. 55). Some occur on the Kingsbridge estuary nearly every autumn (R. P. N.), where it was very numerous in September 1879 and 1890 (E. A. S. E.). The Redshank is by no means common on the Exe estuary. It used to be one of the most numerous of our shore birds on the North Devon estuaries, but has now become comparatively rare. We can remember when every "pill," the local name given to a little stream which had cut for itself a deep passage in the mud to join the tideway, possessed a pair or more of "Pill-cocks," which in such places could be easily stalked and shot. Nor were little flocks of ten or a dozen uncommon on the sands and oozes in the autumn. As we never went at any time of the year to the neighbourhood frequented by the Redshanks without either seeing one or two, or hearing their unmistakable whistle as they flew overhead, we have little doubt that in those days a pair or two nested on the then undrained and unenclosed salt-marshes by the side of the Barnstaple river. Mr. Rodd says that "in the spring its musical cry may be heard in the marshes at a great distance," and it is probable that it is also a nesting species in Cornwall. In Dorset it is common, resident all the year, and is known to nest. In Somerset we have met with it in the spring and autumn; and although Mr. Cecil Smith had no evidence that it bred anywhere in the county, it is not unlikely that it does in suitable localities, which are numerous enough.

Spotted Redshank. *Totanus fuscus* (Linn.).

[Dusky Redshank, Spotted Snipe of Montagu.]

A casual visitor, of rare occurrence, principally to the south coast of the county, where it has been generally seen in the month of August. It has only once been known to occur in the early part of the year, in the month of February.

This species, somewhat larger and with a longer bill and longer legs than the Common Redshank, is only a rare autumnal straggler to the S.W. counties, and although we have frequently had extra fine examples of the latter bird forwarded to us in the belief that they were Spotted Redshanks, it was not until October 1891 that we received the first undoubted specimen of the bird from North Devon, which had been shot on the Barnstaple river after the heavy gales which blew at the middle of that month. This was a young bird in immature plumage. Over a dozen specimens have been secured in the south of the county.

Montagu mentions one killed in South Devon in the month of August, probably the example that was in the British Museum from his collection. Dr. Edward Moore records one shot in the Hamoaze, November 1829 (*Mag. Nat. Hist.* 1837, p. 319). One procured at Kingsbridge in 1842 is now in the collection of the late Mr. J. Elliot of that town. Three specimens were obtained on the Topsham mud-flats in August 1851; these we saw soon after they were shot, and they are recorded by Mr. W. Tombs in the 'Naturalist' for 1852, p. 19. One of them is in the A. M. M. One was killed at Plymouth, August 24th, 1858 (B., MS. Notes). Mr. Byne had a specimen said to have been shot at Slapton Ley in 1864. Mr. Cecil Smith had one in winter plumage shot at Teignmouth ('Birds of Somerset,' p. 376). Mr. J. Gatecombe mentions one killed in February 1874 at the mouth of the river Erme in perfect winter plumage (*Zool.* 1874, p. 3945). Mr. E. A. S. Elliot shot a male, together with two Greenshanks, two Common Redshanks, and two Dunlins, August 24th, 1885; and on August 18th, 1890, he killed two, both females, out of a flock of four on the Kingsbridge estuary (MS. Notes).

In Cornwall the Spotted Redshank is occasionally met with on the marshes in the autumn, and Mr. Rodd received one from the Scilly Isles. During our residence at Weston-super-Mare we examined two, both immature birds, shot in the autumn, which had been obtained by the side of ballast-pits adjoining the Great Western Railway. Col. Montagu received one from his friend Mr. Anstice, of Bridgwater, which had been shot out of a small flock near that town in September. Mr. Mansel-Pleydell can only mention three examples, all obtained in September in various years, for his county of Dorset.

The plumage of the Spotted Redshank varies greatly according to age and the time of year. The adults in their breeding-plumage are sooty black below, with backs of the same colour, the feathers margined with white, and pure white upper tail-coverts; the tail sooty black, with numerous white bars; and are singular-looking birds. The time of their assumption of this dark dress seems greatly to vary, as the blackest bird we ever saw is one we possess which was shot by the Rev. Marcus Riekards at Pagham Harbour, in Sussex, 5th March, 1870, whereas two other fine adults in our collection, obtained from Norfolk at the end of May, are far from being in as complete nuptial plumage. The immature birds are more or less brown all over, with a white patch at the top of the throat, and in their complete winter plumage the adults are ash-grey on the back, with the underparts pure white.

The Spotted Redshank breeds in Norway, Lapland, &c., and its beautiful pyriform eggs are the delight of collectors, from their extreme richness of colour.

[**Yellowshank.** *Totanus flavipes* (Gm.).

When we were at Penzance we were shown by Mr. Vingoe an example of this American Sandpiper which he had shot on a marsh near Marazion on 12th September, 1871. It corresponded exactly with American skins in our possession, and, as Mr. Rodd points out, comes intermediate in size between the Common and Spotted Redshanks, and has a much shorter beak than either, and of course is at once to be recognized by its yellow legs. We have more than once had young Ruffs, which also have yellow legs, sent to us as examples of this American species. The bird figured as a Yellowshank by Mr. Ross in his MS. 'Journal of Occurrences in Nat. Hist.' (1840, vol. iii. p. 52) appears to have been a young Redshank, and from the description may have been an example of *T. fuscus*. According to Dr. Coues the Yellowshank, or "Lesser Telltale," is common east of the Rocky Mountains as a migrant, nesting in high latitudes in Arctic America.]

Greenshank. *Totanus canescens* (Gm.).

A passing visitor, principally in autumn. Small flocks occasionally visit our estuaries in August and September, and it is sometimes, but rarely, observed in spring, and now and then in winter. It is by no means a common species.

At Plymouth examples occurred in 1821 (R. S.); September 1855 and May 10th, 1861 (E., MS. Notes); December 26th, 1862, October 1875, January 13th, 1879, December 1882, August 7th, 1885 (J. G., MS. Notes, and Zool. 1875, p. 4719; 1879, p. 2061; 1883, p. 166; 1885, p. 378). A few generally visit the mud-flats in autumn.

On the Kingsbridge estuary the Greenshank is generally seen in small numbers every autumn (E. A. S. E., MS. Notes).

A pair were seen on the Teign, near Newton Abbot, September 27th, 1871 (G. F. M., Zool. 1872, p. 2945).

On the Exe estuary specimens were obtained in September 1839, September 1844, and September 1845 (F. W. L. R.). Two August 25th, 1851, May 6th, 1853, September 1867, September 1871, and September 1890. There are also several from the Exe in Mr. Byne's collection.

On the Taw a pair occurred September 5th, 1870, and a large flock August 30th, 1871 (M. S. C. R., Zool. 1870, p. 2387; 1871, p. 2809). One May 23rd, 1874 (G. F. M., Zool. 1874, p. 4134).

This fine Sandpiper nests by the lochs in the far north of Scotland, and also in the northern parts of Europe, and is an autumn visitor of irregular appearance on our Devonshire estuaries and rivers. We have seen single examples on the Barnstaple river, always finding them very wary and difficult to approach. The Rev. Marcus Rickards met with a flock of from twenty to twenty-five running on the bank of the Taw close to Barnstaple, in August and September 1871, and informs us that they continued to frequent the same place for some time, and that he succeeded in shooting two of them. He also saw a single Greenshank on the salt-marsh at West Appledore.

Dr. Bullmore considered the Greenshank not uncommon in the south of Cornwall, to which county Mr. Rodd states that it is both a spring and autumn visitor, occasionally remaining until the winter, and mentions two sent to him from the Scilly Isles in December. Mr. Gatecombe has recorded one shot at Wadebridge, September 29th, 1884 (Zool. 1885, p. 21). We never saw a Greenshank in Somerset, and the only instance we can mention is one recorded by Mr. Cecil Smith from Huntspill, August 29th, 1884 (Zool. 1885, p. 66).

The Greenshank occurs in Dorsetshire, sometimes far inland, according to Mr. Mansel-Pleydell, but is somewhat scarce, and "is never so common as the Redshank," being seen singly or in pairs, and never in flocks. The flesh of this Sandpiper is said to be excellent. It is a widely dispersed species, occurring in India, China, throughout Africa, &c., as well as in the north of Europe.

Red-breasted Snipe. *Macrorhamphus griseus* (Gm.).

[Brown Snipe of Montagu.]

An accidental visitor, of very rare occurrence.

Col. Montagu, who first made this species known as a British bird, records, under the name of "Brown Snipe," a male obtained on the coast of Devon in October of some year about 1801, which was deposited in the British Museum; and Dr. E. Moore also mentions one which was in the collection of Mr. Drew, of Devonport (Mag. Nat. Hist. 1837, p. 321). A male in winter plumage was shot in the parish of South Huish by Mr. Andrew Gillard in the winter of 1855; it rose from a marsh like a Common Snipe. This specimen passed into the hands of the Rev. G. S. Marsh, of Sutton Benger, Wilts (H. N., Zool. 1857, p. 5791). One said to have been killed at Hatherleigh was in Mr. Byne's collection, afterwards purchased by Mr. Marsh-Dunn, of Teignmouth.

The Red-breasted Snipe is another of those species of *Limicola* which have wandered to this kingdom from America, where it is abundant as an autumn visitor in the United States, and nests in the Arctic Regions, the only authentic eggs that are known having been taken on the Anderson river. Like most of the shore-frequenting Sandpipers, its red summer plumage is replaced in the autumn by a sober grey livery, in which stage it has been met with three or four times in the south of Devon. We know of no instance of its occurrence in North Devon, but are confident two strange Sandpipers we encountered one day upon the sands of the Taw, and were unable to secure, belonged to this species. Only one other example of the Red-breasted Snipe has been obtained in the S.W. district, one shot on St. Mary's, one of the Scilly Isles, October 3rd, 1857.

Although going by the name of Red-breasted Snipe, this bird is more of a Sandpiper than a Snipe, and occurs in large flocks in the autumn on the sands and oozes of the coast in America, when numbers are shot by the gunners, as its flesh is in high estimation.

Bar-tailed Godwit. *Limosa lapponica* (Linn.).

[Sea Woodcock, Goddin (*N. D.*); Red-breasted Snipe of Montagu.]

A passing visitor in spring and autumn, sometimes numerous on the mud-flats in the estuaries of our larger rivers both in the north and south of the county. Non-breeding birds are occasionally met with in summer: we ourselves obtained a pair in reddish mottled plumage on the mud-banks below Topsham on the Exe on June 10th, 1854; the eggs in the ovary of the female were no larger than duck-shot. There is a specimen in full breeding-plumage in the A. M. M. which was procured on the Exe, May 14th, 1845 (F. W. L. R., MS. Journ. vol. iv. p. 107). Dr. E. Moore mentions a flock of seven, out of which four were shot, on the Tamar in June 1828 (Trans. Plym. Inst. 1830). One was shot close to Milton Ley, June 2nd, 1885 (E. A. S. E., MS. Notes). Many occurred at Plymouth in May 1876 in spring plumage (J. G., Zool. 1876, p. 4992), and hundreds visited the Kingsbridge estuary at that time. The wind had blown continuously from the east for three weeks (E. A. S. E., *in litt.*). Montagu's "Red-breasted Snipe," a flock of which visited the south coast of Devon, May 21st, 1803 (Linn. Soc. Trans. ix. p. 198), must have been this species in summer plumage. This bird occurs occasionally in the winter months at Plymouth, and on the Kingsbridge, Dart, and Exe estuaries. We saw a large flock near Budleigh Salterton on 14th December, 1890, and many were shot near Exmouth about that time.

There is very great variation in the length of the bill in this Godwit, due to sex and age, immature birds having it much shorter than the adults. A curious pale variety shot May 10th, 1844, on the Exe estuary, is in the A. M. M. (F. W. L. R., MS. Journ. iv. p. 111).

In Norfolk, according to Mr. Stevenson, the name "Scamell" is applied to the Bar-tailed Godwit, and the word occurs in Shakespeare. Mr. Harting thinks the "immortal bard" wrote "sea-mells" or "sea-malls," *i. e.* Sea-gulls; but we consider it probable that the word should be "Schimmel," a Dutch term applied to roan or "strawberry" horses, and other animals suffused with red colour and white.

The "Goddin," as the shooters on the Barnstaple river termed them, were usually expected on its sands at the time of Barnstaple Fair, that is to say about the middle of September, and there was great excitement when the first flocks had been seen and announced. The birds were singularly tame on their first arrival, appearing in flocks of from a dozen to thirty, and would be noted feeding in a long straggling line at the edge of the mud, and as they were approached the outside birds would run in towards the centre, so that the gunner would find them awaiting his shot huddled together in a compact group, obtaining sometimes a dozen or more at a single discharge of his gun. As the tide was ebbing the flocks would be seen flying up the river to feed upon the uncovered flats, their soft whistling cry would be heard as they came near, and they would pass close to any boat upon the river in their

course, frequently paying heavy toll through this want of caution. No amount of persecution appeared to make them any wilder, and as long as they remained and were repeatedly being joined by fresh arrivals they were most easily to be shot. At the beginning of October they all disappeared, and we never saw a Bar-tailed Godwit in full winter plumage from the Barnstaple river, although we possess one shot on the estuary of the Dart. Small flocks of Bar-tailed Godwits were not uncommon on the Taw in the spring, when they were in the full red plumage, and we have some fine examples. Occasionally they remained until the middle of June, and one day when we were bathing at Instow, in looking towards the shore, we saw about a dozen in their beautiful summer dress walking about among our clothes. The flocks appearing in the autumn are mainly composed of young birds, when brown, grey, and buff are the prevailing tints of their plumage. Genuine eggs of this bird are rare in collections, but a few have been obtained of late years in Lapland and Finmark, and are said "to be different in texture and more glossy" than those of the Black-tailed Godwit (Zool. 1892, p. 30).

The Bar-tailed Godwit also occurs commonly on the Cornish, Dorset, and North Somerset coasts in the autumn.

When the tide has been high, covering all the sands and mud-flats, we have occasionally flushed and shot single examples of this Godwit in turnip-fields adjoining the river. We have seen the birds using their long legs to wade in the little pools left by the tide on the sands, or at the edges of the ooze as the tide has been running out.

Black-tailed Godwit. *Limosa egocephala* (Linn.).

A casual visitor, of occasional occurrence, in spring and autumn, principally on the south coast of the county. It is very rare in North Devon.

Although this Godwit formerly nested in the fen districts in the east of England, and at the present time breeds commonly so close to us as in Holland, it is now only an uncertain spring and autumn migrant, and is extremely rare in the western counties. In North Devon we know of only two examples having been obtained on the Taw, both immature birds, which were shot in September, one in 1859, the other in 1868. In the south of the county the Black-tailed Godwit has occurred more frequently, and several have been shot in the spring in the handsome breeding-plumage.

The Black-tailed Godwit is longer both in the beak and legs than the Bar-tailed species, and is not so red in its summer plumage.

Dr. E. Moore records a specimen shot on Dawlish Warren, near Exmouth, in 1829, and mentions that Mr. C. Prideaux said it was not unfrequently met with in his neighbourhood [Kingsbridge] (Mag. Nat. Hist. 1837, p. 319). One was obtained on the Exe, September 1839 (F. W. L. R., MS. Journ. ii. p. 103). A female shot there was brought to us in the flesh September 1st, 1851. One in breeding-plumage is in the A. M. M.; and another is in Mr. Byne's collection which is said to have been obtained on the Exe. One was killed at Yealmpton, September 18th, 1855 (B., MS. Notes). Four were shot at Slapton Ley in August and September 1864 (C. S., 'Birds

of Somerset,' p. 390). A pair were shot on the Exe estuary, March 2nd, 1864 (J. C. Tyrwhitt-Drake). Two occurred there in May 1867 (W. Taylor), and one in October 1870. One was shot on Thurlestone Ley, September 14th, 1877 (H. N.). A female, apparently in an exhausted state, was killed in the meadows at Preston, some distance from the Kingsbridge estuary, August 18th, 1889; and in May 1890 one was shot at Bearscombe pond (E. A. S. E., MS. Notes). There is a specimen in breeding-plumage, killed near Kingsbridge, in the collection of the late Mr. J. Elliot.

In Cornwall and also in Dorset this Godwit is a rare straggler, but few being mentioned in the account of the birds of those counties, and in Somerset the only specimen which came into the hands of Mr. Cecil Smith was a young bird of the year purchased from a poulterer, who had received it from the neighbourhood of Bridgwater.

Whimbrel. *Numenius phaeopus* (Linn.).

[Cuckoo Curlew (on the Exe), Stone Curlew, Half Curlew, Jack Curlew (*N. D.*), May-bird.]

A passing visitor in spring and autumn, arriving in April and May. After a short stay with us in spring it leaves for its breeding-places, returning in July and August, and remains until the end of September, frequenting the mud-flats in the estuaries of our larger rivers. Some occasionally remain till late in the winter. Probably owing to this late stay both Moore and Turton considered it a winter visitor. One was killed out of a flock at Instow, North Devon, in January 1868 (G. F. M., Zool. 1868, p. 1135).

Whimbrels are usually seen in small parties, but sometimes large flocks are met with. They are rather tame on their first arrival in spring. We see some every year about the first week in May on the sea-beach at Exmouth.

The Whimbrel is a well-known and common bird upon our North Devon estuaries, where it arrives regularly at the beginning of May, and, after spending about a fortnight with us, proceeds on its journey to its breeding-haunts in the far north. It is seen again on its return south in the autumn, but it is never so numerous on the North Devon rivers at that season of the year as it is in the spring. Some autumns would pass without a single young Whimbrel having appeared on the sands of the Barnstaple river. The Whimbrel is a very tame and confiding bird, and when it is running upon the shingle it will squat and trust to its plumage harmonizing in its grey tints with its surroundings to conceal it from observation, and we have frequently been startled by almost treading upon one which has either run away or risen reluctantly on wing from beneath our feet. Owing to the Sea Birds' Preservation Act the tameness of the Whimbrel has greatly increased, and we have been told by a boatman at Instow that in May they may be seen running along on the road passing through that little watering-place "like chickens." The Whimbrel is honoured by many local names. The North Devon shore-shooters call it the Half Curlew or Jack Curlew; we have also heard it called the Seven Whistlers

and the Titterel, in allusion to its musical piping notes; in some parts of the West of England it is called the Cuckoo (!); and we once saw a friend, who lived near Honiton, point out with his whip a Whimbrel which was feeding on a meadow by the sea-side, as he drove along the road, and heard him say, "It is not often you see a Cuckoo so close as that." Around Bridgwater Mr. Goldsmith (Zool. 1888, p. 67) states that the Whimbrel is known as the "Cowslip bird;" that it is seen on the neighbouring moors for about three weeks in May, and is supposed to vary in its numbers according as it is a good or a bad cowslip year!

There is no record of the Whimbrel ever having nested in the south of the kingdom, but one which started up from the heather in front of us, on the top of Skomer Island, off the S.W. coast of Pembrokeshire, and ran off slowly trailing her wings, on the last day of May, looked very much like a breeding bird. Unfortunately at the moment we were in keen pursuit of something else, and when we returned to search for our Whimbrel's nest (?) had lost count of the precise spot.

The Whimbrel is, evidently, one of those birds whose passage south in the autumn is chiefly by a different route from the one followed northwards in the spring.

Curlew. *Numenius arquata* (Linn.).

[Whistling Curlew.]

Resident, some breeding on Dartmoor, also in many places on the rough high ground in the north-east and north-west of North Devon, and on the higher hills of Exmoor. Small flocks may be seen feeding on the mud-flats in the estuaries of the larger rivers at all times of the year, but their numbers are greatly increased at the end of August or the beginning of September, at which time large flocks are wont to ascend the estuary of the Exe to feed on the marshes below Countess Weir.

According to Mr. Gatcombe the resident birds go to the moors early in March. The eggs are laid in May. Two eggs were found on Sherbitor Farm, Dartmoor, two miles from Prince Town, May 11th, 1886. After rearing their young they return to the sea-coast in August (J. G., Zool. 1877, p. 279; 1878, p. 249; 1879, p. 420; 1882, p. 458; 1887, p. 376). Curlews are said to roost at night on the sea-cliffs with the Gulls. They have been known to breed on the shores of the Plymouth harbours (J. C. B., Nat. Hist. S. Devon, p. 298, note).

In the autumn and winter large flocks assemble, feeding by the water-line at low tide, and betaking themselves to the marshes or to wet stubble and turnip-fields on the hillsides when the sands and oozes are covered.

The Curlew is the most wary of all the shore birds and the most difficult to approach. By watching their line of flight, and lying up for them behind a hedge, it is possible to get a shot once or twice, but not oftener, as the birds will very soon detect the danger and take another direction. In the spring we have sometimes succeeded in whistling them

within range of some carefully chosen ambush. A good many Curlews nest on the rough moory hills in North Devon. In May 1890 we came across several pairs on the high ground above North Molton, called North Molton Ridge, and we have information of nests near Bradworthy. We sat for some time one day on a stone close by the side of a Curlew's nest, and after a little while the two old birds, which had been gradually approaching nearer and nearer, plaintively whistling, came and perched on stones on either side of us. We were greatly amused at having these wary "*lang nebbit things*" reduced to this state of tameness, and, as we sat watching their anxiety, felt as if we were paying out the whole Curlew race in their persons for many a stalk after wild duck which had been baffled by the ill-omned scream of some prying Curlew, putting up our birds just at the critical moment when a few more yards of crawling over the mud would have resulted in a successful shot. The Curlews are always the first birds to take wing, as the gunner is drifting in his boat towards the edge of the shore, where perhaps he has marked a nice lot of Wigeon and Teal resting, and their loud cries make all the other birds uneasy, and almost certain to rise before a shot can be obtained. Many Curlews breed on Brown Willy and Roughtor, in the centre of Cornwall, and Mr. Rodd states that the moormen search eagerly for the young birds, which are considered great delicacies. In Dorset some are known to breed near Wareham.

[*Observation.*—Mr. Thomas Cornish, of Penzance, recorded in the 'Zooologist' for 1887, p. 388, an adult example of an Esquimaux Curlew, *Numenius borealis* (J. R. Forster), a wanderer from North America, which had been obtained at Tresco, on the Scilly Isles, September 10th that year, and is now in the collection of Mr. Dorien-Smith at Tresco Abbey. It was in company with a Whimbrel when shot. The Esquimaux Curlew bears a superficial resemblance to a small Whimbrel, but may at once be distinguished by the arrow-head markings on its breast and flanks. Dr. Coues states that it migrates through the Missouri region of the United States in immense flocks in May. He met with it also in Labrador, where it is very abundant, the flocks being easily enticed within gunshot by an imitation of their oft-repeated, mellow whistle. The birds feed almost entirely on the crowberry (*Empetrum nigrum*). Their nesting-station is in Arctic America, where they breed in great numbers in the Anderson River region ('Birds of the North-West,' p. 512).]

Order GAVIÆ.

Family LARIDÆ.

Subfamily STERNINÆ.

THE TERNS.

The beautiful and graceful Terns, or "Sea-Swallows" as they are often called, are but little known on our Devonshire coasts, as they are seldom seen except when they pass along our shores in spring and autumn on their migrations. We cannot boast that any of the species spend the summer and find a nesting-station on our beaches. The only places we know of in the South-west of England where any breed are the Chesil Beach, near Weymouth, and one or two other spots on the Dorset coast, where numerous nests of the Common Tern, together with a few of the Little and Sandwich Terns, may be met with, and on some of the Scilly Islands; while the rare Roseate Tern, which once in considerable numbers nested on those islands, no longer does so, and there is no authenticated instance even of its appearance on any of our Devon waters. The Terns nesting at the present day on the Scilly Islands are the Arctic, Common, and Sandwich Terns, and of these the first is by far the most numerous. A few Common Terns may nest occasionally on the Cornish coast. Although most of the British species have been recorded from Devonshire, the Arctic, Common, and Black Terns are the only three which we can claim as being at all common; the fine Sandwich Tern, chiefly in immature plumage, may be seen occasionally fishing off the southern shores of the county, and the Little Tern also occurs not unfrequently, while there are several others, such as the Whiskered Tern, the White-winged

Black Tern, the Gull-billed Tern, and the Caspian Tern, which have either been observed in single instances only, or whose reported occurrence is open to doubt. Besides the species we have mentioned three others have occurred in British waters. Two or three examples of the Sooty Tern (*Sterna fuliginosa*, Gmel.), a single one of the Smaller Sooty Tern (*Sterna anæsthesa*, Scop.) obtained off a lightship at the mouth of the Thames in 1875, and two examples of the Noddy (*Anous stolidus* (Linn.)) are recorded, the last secured off the coast of Ireland in 1830.

A party of Common Terns fishing is a pretty sight as they beat backwards and forwards a few feet above the surface of the water, one of them every now and again checking itself for a second and dropping down to seize a small fish espied below; their grey and snow-white plumage, with black heads, red beaks, and red legs, contrasting well with the blue of the sky above and the blue-green water beneath. All the while they are fishing the birds keep up a querulous screaming one to another, and if, as they are fond of doing, they are following the run of the tide, they keep one after the other almost in line, and as one is watching them the long drawn-out party gradually disappears in the distance, the little white flashing forms getting more and more indistinct after all recognition of their cries has ceased.

Mr. E. A. S. Elliot watched some Common and Arctic Terns feeding on the South Coast in October 1891, and observed that the birds were sometimes completely submerged when dropping on their prey and were quite hid from sight, but at other times were not. He thought it depended on how far the fry of which they were in pursuit was below the surface of the water. The Arctic Terns appeared to be the most vigorous in their plunges, and the quickness of their evolutions was wonderful.

Arctic Tern. *Sterna macrura*, Naumann.

[Pearl Gull.]

A passing visitor in spring and autumn, much more numerous in some years than in others.

On May 8th, 1842, great flights of this Tern visited the Exe, and hundreds were killed with sticks and stones, being in an exhausted state (F. W. L. R., MS. 'British Laridæ'). About the same date great numbers of Terns, both Common and Arctic, but mostly the latter, appeared after a gale in Kingsbridge estuary and along the coast. Thousands were seen and many were killed in the same manner as we have described already. They remained about a week and departed as suddenly as they came (H. N., MS. Notes; J. G., Zool. 1872, p. 3260). Mr. Ross considered that young Arctic Terns were more numerous than any other kind on the Exe, but we have not ourselves found this to be the case. Certainly the birds that visit us in autumn are mostly immature, and were very numerous on the coasts at the beginning of October 1871, and at Plymouth October 1886 (Zool. 1887, p. 377). A male and female were killed between Bantham and Thurlestone in May 1878, and many were seen at Beesands in October 1891 (E. A. S. E., MS. Notes). An adult was shot at Exmouth at the end of August 1891 after southerly gales. This species was plentiful on sandy parts of the North Devon coast in the autumn of 1859 (M. A. M., Zool. 1859, p. 6761); and many flocks were seen on the Taw and Torridge in May 1874 (G. F. M., Zool. 1874, p. 4134).

The Arctic Tern is a common spring and autumn visitor to our estuaries, where in September it may be seen in company with the Common Tern, and can hardly be distinguished from it when the birds are wheeling about and fishing. Although it is a more northern bird than the Common Tern, breeding at stations which are beyond the northern range of that species, it is nevertheless, according to Mr. Rodd, more numerous represented on the Scilly Islands, where it nests commonly. There appears to be no place on the south coast of England where the Arctic Tern breeds, for Mr. Mansel-Pleydell declares that it does not nest anywhere on the Dorset coast, in spite of Mr. Cecil Smith's assertion that he himself took its eggs on the Chesil Beach. After reading Mr. Cecil Smith's very interesting account in the 'Zoologist' for 1883, p. 454, of his visit to that locality, it is quite plain to us that he may have been mistaken, as it would be impossible to separate the eggs of the Arctic and Common Terns unless the old birds were actually caught on or shot off the nest, and this cruel method of identification was not adopted. The Arctic Tern deposits its eggs, which are generally two but sometimes three in number, in a hole scratched among the pebbles on the beach, sometimes with a scanty lining of grass, but most often without any lining at all. The young when first hatched are covered with a greyish down, and, like those of the Ring Dotterel, are very difficult to detect upon the ground.

This species closely resembles the Common Tern, but may be known from it by its darker pearl-grey plumage, by having the underparts equally as dark as the back, and by its conspicuously shorter tarsus.

Common Tern. *Sterna fluviatilis*, Naumann.

[Miret, Mackerel-Bird, Sea-Swallow, Gull-teaser (*N. D.*.)]

A passing visitor in spring and autumn, being most frequently met with at the latter season, especially after storms, when it ascends the river estuaries.

It is difficult to separate records concerning this and the preceding species, but, like that and some other Terns, it is sometimes met with on the coast and estuaries in extraordinary numbers in a weak and exhausted condition. Dr. E. Moore relates that great numbers of young birds frequented the shores of Plymouth harbours for two or three days after a strong gale in October 1828; many of them were very weak, and some were picked up starved (*Trans. Plym. Inst.* 1830). Mr. E. A. S. Elliot states that "after a continuous and heavy gale from S.W. to N.W. for forty-eight hours, October 16th, 1886, at dusk, near Rowdon Point, in Kingsbridge estuary, an immense flock, some hundreds, of Common Terns appeared and a few pitched on the Point, and that two of them were shot. Next day one was caught alive in an exhausted state." A considerable flight visited the coast at Beesands in October 1891. The Common Tern is seldom seen at Plymouth before September, but Mr. Gatcombe saw an adult on August 10th, 1881, hovering over a shoal of mackerel. He obtained a young bird as late as November 22nd, 1876 (*Zool.* 1877, p. 45; 1882, p. 63).

We have seen this Tern on the Exe in July and August (1854, 1855, 1863, and 1891). It is rarely observed in winter. Some are said to have been seen at Salmon Pool, near Exeter, in December 1870 or January 1871, but the birds then observed may have been Arctic Terns.

To be seen regularly every autumn as it is beating south, this beautiful species sometimes occurs in large flocks in the spring when some sudden gale has intercepted it in passage and driven it to seek shelter in our tidal rivers. We remember some years ago a great multitude of Common Terns appearing in May at Barnstaple, flying over the river by the bridge, and receiving the usual welcome from all who had a gun ready to hand. In September there are usually many of these Terns on the Barnstaple and Bideford rivers to be seen coming in with the tide and following it inland, wheeling about, and fishing by throwing themselves from time to time abruptly into the water. We have occasionally seen a single Tern as late as November at Instow, but the main body of the birds which visit our North Devon estuaries goes further south early in October. We know of no Devonshire nesting-place of the Common Tern. A pair or two were said to breed on Steart Island, off Burnham, in North Somerset, but we could not find any one June morning we visited the

island expressly to look for them. The Common Tern breeds upon the Scilly Islands, on some places on the coast of Cornwall, as at Newlyn, where Dr. Bullmore states that eggs were found and taken by his cousin Mr. W. Bullmore, of Trescobeas; also on the Chesil Beach on the Dorset coast, and on Skokholm Stack, a small island off the south-west coast of Pembrokeshire, where we were informed by some boatmen there were about twenty nests. Mr. Cecil Smith states that the most advanced of the young birds found by him when he visited the Chesil Beach on August 5th, 1883, "hid themselves amongst the pebbles and stalks of a wild pea (*Lathyrus maritimus*), which I believe is rather local, but which grows on parts of the Chesil Beach. The young birds hid amongst these peas, with their grey backs just showing above the leaves; they looked like largish grey pebbles, of which there were a good many about. They kept perfectly still, so still indeed that we were sometimes in danger of treading on them" (Zool. 1883, p. 454; 1888, p. 206).

The adults of this beautiful species of Tern have a delicate salmon tinge upon the breast, which soon fades away from skins and mounted specimens.

[Roseate Tern. *Sterna dougalli*, Mont.]

The recorded instances of the occurrence of this species in Devonshire are all either erroneous or open to doubt. "One in North Devon, September 1859" (G. F. M., 'Naturalist,' 1866, p. 360). The reference there given to the 'Zoologist,' 1859, p. 6761, is wrong, the Gull-billed Tern and not the Roseate Tern being mentioned by us, and we now believe this specimen was a young Whiskered Tern, but unfortunately the skin no longer exists (M. A. M.). Another recorded by the late Mr. Cecil Smith as having been shot at Exmouth in the autumn of 1863 or 1864 was incorrectly determined, as that gentleman himself informed us. Mr. Gatecombe mentions two which were said to have been seen in Plymouth Sound in April 1874 (Zool. 1874, p. 4105).

From various causes this most graceful and elegant of all our British Terns has within the last half-century become extremely rare as a British species, and most of its old nesting-stations have been abandoned. In 1840 it was quite a common nesting-bird, according to Mr. Rodd, on the Scilly Islands, but there have been none there now for years, nor is the bird ever seen at the present day off the Cornish coast. The only recorded Cornish example we know of is one stated by Dr. Bullmore to have been shot on the Swanpool at Falmouth in 1846. In former years this Tern was also obtained on the Dorset coast, and Mr. Mansel-Pleydell speaks of *seven* having been killed at one shot at Weymouth. We know of no Somerset examples of the Roseate Tern any more than we do of any from Devonshire. A very fine adult, picked up dead some distance inland in the neighbourhood of Pembroke in 1885, is the only recent specimen of which we have knowledge in the S.W. of England. The persistent persecution by eggers has doubtless been the cause of the present scarcity of this beautiful species. It is said to be very abundant in many parts of America.]

Little Tern. *Sterna minuta*, Linn.

A casual visitor, of occasional occurrence, in summer and autumn.

The adults are rare and generally occur singly in summer, whilst the young birds of the year are met with in small flocks in the autumn. Many breed on the Chesil Bank on the neighbouring coast of Dorset (C. S., Zool. 1883, p. 454; Ernest Salmon, Zool. 1888, p. 307).

Dr. E. Moore mentions two shot in Plymouth Sound, where it appears to be very rare. An adult occurred at Kingsbridge September 29th, 1876 (H. N., Zool. 1876, p. 5179). A flock of seven was noticed on Thurlstone Sands, September 10th, 1877, and one shot from it proved a fine adult male (E. A. S. E., MS. Notes). One on Torbay, October 1876 (G. F. M., Zool. 1876, p. 5161).

Mr. Ross had one shot on the Exe in 1839 and says "it was not very common" (MS. Journ. vol. ii.). We obtained several immature birds on the Exe estuary, October 10th, 1854, one in October 1855, and saw some in September 1882. We also observed an adult in the Bight near Exmouth in July 1855. An adult from the Exe estuary is in Mr. Byne's collection; and another adult was shot at Exmouth in 1890. Adults (in winter plumage) and young birds occurred at Exmouth at the end of August 1891 after stormy weather.

One occurred on the Taw in 1856 (M. A. M., Zool. 1851, p. 5348). An adult in moult August 13th, 1868 (C. S., Zool. 1863, p. 1378). Two immature females on Northam Burrows, September 13th, 1870 (Zool. 1870, p. 2387).

This small species of Tern is only an occasional visitor to the North Devon coast. We have specimens from Instow in immature plumage obtained in September. Our friend, the Rev. Marcus Rickards, shot two at West Appledore, and has informed us that he once observed a flock of upwards of thirty on the shore at Northam Burrows beyond the Pebble Ridge. "They flew in from the sea before an impending storm, during the continuance of which they crouched quietly on the sand, presenting a very pretty and interesting appearance." We have received adult examples from the Somerset coast, near Weston-super-Mare, in the spring, but know of no nesting-station anywhere in that county. Off the Cornish coast the Little Tern is not rare in the spring and autumn, and to the Dorsetshire coast it is a regular summer visitant, breeding on the Chesil Bank, at Langton Herring, and also at Abbotsbury with the Common Tern (Mansel-Pleydell, 'Birds of Dorset,' p. 106). Mr. Cecil Smith noticed several Little Terns flying towards the shore with fish in their beaks for the purpose of feeding their young on the occasion of his visit to which we have already referred. The Little Tern is extremely tame and confiding at its nesting-station, and there is no prettier sight than one occupied by numerous pairs of these beautiful birds. We have one such before our mind's eye as we write which we once visited, contenting ourselves with a short stay in which we only admired, and refrained from touching either bird or egg.

Caspian Tern. *Sterna caspia*, Pallas.

An accidental visitor, of very rare occurrence.

Mr. Ross gives figures of this Tern in his MS. 'British Laridæ,' and remarks that it is "by no means common on the Exe, seldom more than four or six being seen during the summer. Their flight is high, and they are much more shy than the other Terns, keeping to the open sea or the rocks in small quiet bays of the coast." Whether these observations really apply to this species it is difficult to determine. Mr. R. Cumming, however, informs us that a specimen was shot by Mr. Rudd, a well-known sportsman, near Topsham, and was stuffed by Truscott. It was, he thinks, probably the one figured by Mr. Ross. We know of no other specimen being obtained on the Exe. An immature bird occurred at Teignmouth in Oct. 1861 (R. C.). Another is said to have been shot on Torbay, September 28th, 1873 (E. P., Trans. Devon. Assoc. viii. p. 301).

Although this fine Tern is to be found in the summer-time breeding so near to us as on the coasts of Sweden and Denmark, it is only a very rare straggler to our eastern and southern shores, and of the few instances which are recorded of its occurrence some may perhaps be erroneous. Thus, not very long ago a pair of Caspian Terns were reported to us from Torbay, which proved to be only Sandwich Terns in adult plumage. The superior size of the Caspian Tern, its bright coral-red beak and black legs, ought to ensure its easy recognition. We never heard of one in any stage of plumage having been obtained on the North Devon coast, and the only reported Devonshire examples come from the south coast of the county. No Cornish Caspian Tern appears to be known. The late Mr. J. Rodbard-Rodbard, of Aldwick Court, Wrington, in the county of Somerset, wrote to inform us that he had in his collection a pair of Caspian Terns which had been shot on the breakwater at Weymouth when he was on a visit to that town in the year 1848. We believe this to be the pair of Caspian Terns from Weymouth Mr. J. H. Gurney states in his paper on the British examples of this species that he was unable to trace (Zool. 1887, p. 457). After Mr. Rodbard's death his collection was sold, and we have no information as to the present owner of these rare specimens. Mr. Mansel-Pleydell has recorded two others, one shot in Poole Harbour in 1869, and another on the Wareham river in July 1872.

The Caspian Tern has an extensive range over many parts of the world. Eggs of this species in our possession were taken on an island in the Persian Gulf.

Gull-billed Tern. *Sterna anglica*, Mont.

An accidental visitor, of extremely rare occurrence.

An immature bird was killed near Plymouth in October 1866, and is now in the possession of Mr. J. Brooking-Rowe (J. G., Zool. 1867, p. 557).

Mr. Ross mentions another immature example shot on the Exe, August 25th, but does not say in what year. It was probably a young Sandwich Tern. This is another Tern which nests on the coast of Denmark, and occasionally, but very rarely, visits England. It is a more southern species than the Caspian Tern, and its summer haunts are to be sought chiefly in the marshes of the south of Spain, whence the eggs in our collection, taken by Lord Lilford, who kindly presented them to us, were obtained, as also in the south of Greece, Asia Minor, &c. In the autumn of 1859 a great multitude of Terns of various species frequented the Barnstaple river, and among those which came into our hands were two in immature plumage which we had a difficulty in determining, and, from the beaks and size, considered at the time to be young Gull-billed Terns. Unfortunately they were but indifferently preserved, and, becoming infested by moth, had to be destroyed, and we can only record them now with some amount of doubt (Zool. 1859, p. 6761). The only English-killed examples of this Tern in full adult plumage we have ever handled are some fine specimens in the museum at Dover which were shot many years ago either at Rye or Lydd, on the Kentish coast. In size the Gull-billed Tern comes very close to the Sandwich Tern, than which it is only about an inch shorter in length, and is to be known from that species by its short, stout, gull-shaped beak of a dark red colour, and by its yellowish-brown legs.

Mr. E. H. Rodd mentions two examples of the Gull-billed Tern, both in full summer plumage, one of them from the Scilly Isles, where it was shot near Treseo Abbey at the end of May or the beginning of June 1852 by the Rev. J. Jenkinson, the other from St. Just, near Penzance, on 11th July, 1872. The latter bird was a female, whose ovary was full of eggs. Mr. Mansel-Pleydell records no instance of its occurrence in Dorsetshire.

Sandwich Tern. *Sterna cantiaca*, Gm.

A casual summer and autumn visitor, of occasional occurrence.

Dr. E. Moore mentions a pair shot in Plymouth (Trans. Plym. Inst. 1830) and one on the Tamar, April 1831 (Mag. Nat. Hist. 1837, p. 360). A few come up the estuary of the Exe in some seasons. A flock of adults was seen near Topsham at the beginning of May 1853, and one was shot. We saw a single bird on June 10th, 1854, just above Topsham, and several were shot on the Exe estuary in the following September in beautiful plumage (W. D'U.). Mr. Ross obtained one at Plymouth, and there are two fine specimens from his collection in the A. M. M., probably shot in 1854 on the Exe. Mr. Cecil Smith secured one at Exmouth, April 12th, 1867 (Zool. 1867, p. 832). A flight occurred in Plymouth Sound, and one was shot in full breeding-plumage, March 31st, 1876. This Tern is very uncommon near Plymouth, although young birds are sometimes met with in autumn, but adults rarely (J. G., Zool. 1876, p. 4903; 1882, p. 64). An immature specimen killed at the Start

Lighthouse, October 19th, 1886, is the only one which has ever occurred in the Kingsbridge district (E. A. S. E., MS. Notes). Adults have been occasionally shot on Torbay.

This species only very rarely visits the North Devon waters, and we have never obtained an example from them in complete plumage, although we have occasionally seen large Terns flying over the mouth of the Barnstaple river which we concluded were adult Sandwich Terns, and the Rev. Marcus Rickards informs us that he also has once or twice come across large Terns in the same locality without being able to obtain a shot at them. In the more favoured bays and estuaries in the south of the county the Sandwich Tern occurs pretty regularly every autumn, although even there examples of adults in complete plumage are rare in comparison with immature birds. Of the latter Mr. Cecil Smith's collection contained several examples shot by himself off Exmouth.

Mr. E. H. Rodd states that a few pairs of the Sandwich Tern visit the Scilly Isles in the summer and nest there, and that the bird is not very rare off the Cornish coast. It no longer nests with the other Terns on the Dorsetshire beaches as Mr. Mansel-Pleydell considers it did formerly, but is seen in Poole Harbour and at other places on the coast pretty regularly both in April and again in the autumn. The opaque waters of the Bristol Channel off the North Somerset coast are very rarely visited by Terns, and we have no knowledge of any Somerset example of a Sandwich Tern.

The eggs of the Sandwich Tern vary greatly and are very beautiful. A few of these fine Terns are said to nest on the coasts of Kent, Essex, Lancashire, and Cumberland, on the Farne Islands and on Coquet Isle, off the coast of Northumberland, on one of the islands in Loch Lomond, on a few places on the east coast of Scotland, and on a lough in the North-west of Ireland; but it is only too probable that some of these stations are deserted at the present day, and that the birds continue to resort only to those where they are protected from the ravages of the exterminating egg-stealer.

[Sooty Tern. *Sterna fuliginosa*, Gm.]

Mr. Foot, the bird-stuffer of Bath, has in his possession a very perfect example of the Sooty Tern, which he has shown us, caught alive near Bath after stormy weather in October 1885. Mr. J. E. Harting, in his 'Handbook of British Birds,' p. 170, records three other British specimens, one of them said to have been obtained on the estuary of the Axe, near Axminster, and recorded by the Rev. J. B. Selwood, in the 'Field,' 17th July, 1869. This, Mr. Harting considers, may have been only a Black Tern. "The death of Mr. Selwood has unfortunately prevented a solution of the doubt."

The Sooty Tern inhabits the West India Islands, Central America, the South-Sea Islands and Australia. Great numbers breed on Ascension Island, and we possess some beautiful photographs of the "Wide-awake

Fair" very clearly showing the eggs and young birds upon the gritty sandy plain near the centre of the island, together with multitudes of Sooty Terns all facing one way, their heads pointing in the direction of the wind. These photographs were obtained for us by our kind old friend and constant correspondent, Mr. J. Gatcombe.

We have ourselves seen and eaten the eggs of the "Wide-awake" at Ascension, and found them very similar in taste to those of the Black-headed Gull from Scoulton Mere in Norfolk. They were often brought on board the Cape mail steamers calling at the island. Each bird lays a single egg. (W. D'U.)

The Sooty Tern is black above, with white underparts, and has a patch of white upon the forehead, with jet-black back and legs. Its eggs, of which we possess a large series, vary greatly in colour, shape, size, and markings, some of the varieties being of extreme beauty.]

Whiskered Tern. *Hydrochetidon hybrida* (Pallas).

An accidental visitor, of extremely rare occurrence.

This Tern has received its English name from the white line which in the adult runs from the gape beneath the eye contrasting with the black cap and with the general dark iron-blue and black of the rest of the plumage. It is a southern species, common in the summer on the basin of the Mediterranean, in Africa, India, China, and Australia. Mr. Harting's 'Handbook' enumerates only five examples for the whole kingdom, three of them from the West of England, and there appear to have been no others obtained since his book was published in 1872. We possess an adult in our collection, which we received some years ago from the late Mr. Burt, the Curator of the Torquay Museum. This example was *said* to have been picked up at Paignton; but Mr. Burt had his doubts about it, and would certainly have kept it for his own museum had it been free from suspicion, and to our eyes it looks as if it had been mounted from a relaxed skin. There seems to be only one authentic specimen from Devonshire, the particulars of which are as follows:—

An adult was picked up on the water by some fishermen, alive, but apparently in an exhausted state, off Plymouth, May 10th, 1865 (J. G., Zool. 1865, p. 9629). This beautiful specimen, which was in full breeding-plumage, was presented to Mr. Howard Saunders by Mr. Gatcombe (Yarrell's B. Birds, 4th ed. iii. p. 529).*

An immature bird shot near Tresco Abbey, Scilly, in August 1851, was the only one known to Mr. Rodd; and according to Mr. Yarrell (1st ed. vol. iii. p. 404) one obtained in August 1836, at Lyme Regis in Dorsetshire, was the first example recorded as having occurred in the British Isles.

The Whiskered Tern nests commonly in the marismas of the south of Spain, in Turkey, &c., and is said to be a very abundant bird in the Nile valley.

* We learn from Mr. F. C. Hingston, of Plymouth, that the Whiskered Tern given to him by Mr. Gatcombe was a dry skin.

White-winged Black Tern. *Hydrochelidon leucoptera* (Schinz).

An accidental visitor, of very rare occurrence. We think that this little Tern may occur more frequently on our southern coasts than is supposed, and may occasionally be overlooked. In the immature plumage the young of this species and those of the Black Tern might easily be confounded.

Mr. F. W. L. Ross, in his MS. 'British Laridæ,' figures a specimen which he says was in Mr. Pincombe's collection at Plymouth, and was supposed to have been killed on the Breakwater there. One, in full moult, which we have examined, was shot in the harbour at Ilfracombe on 2nd or 3rd Nov. 1870, and is in the collection of Mr. Westlake of that town (Harting, Handbook B. Birds, p. 169; H. Saunders, Yarrell's B. Birds, 4th ed. iii. p. 523). An immature specimen from Mr. Ross's collection is in the A. M. M., and was probably obtained on the Exe; Mr. Ross does not seem to have discriminated between it and some immature Black Terns with which it was cased. One said to have been obtained at Kingsbridge is in Mr. Byne's collection, which passed into the hands of the late Mr. Marsh-Dunn of Teignmouth.

The Rev. A. P. Morres, Vicar of Britford, near Salisbury, has informed us that on 30th April, 1891, he saw a little flock of five adult White-winged Black Terns flying over the Salisbury Avon. The birds passed close where he was standing, and there could be no error about them. We also learn from him that Mr. Hart, the well-known bird-stuffer of Christchurch, has frequently met with this species of Tern in the spring, has some very good examples of it, and expects to see it with regularity.

An adult of the White-winged Black Tern was shot on the Long Pool at Tresco, on the Scilly Isles, on 14th May, 1882, and is now in the collection at Tresco Abbey. An immature example was secured at Sennen, in Cornwall, and was submitted to Mr. Howard Saunders, who pronounced it to be a White-winged Black Tern (J. H. Gurney, Zool. 1887, p. 387). An adult was shot in Poole Harbour, in the month of June, and Mr. Mansel-Pleydell also refers to Mr. Hart as his authority for the frequent appearance of this species both on the Hampshire and Dorsetshire coasts in May and June.

The White-winged Black Tern is a southern species possessing a most extensive range over the world, being found throughout the south of Europe, Asia, Africa, Australia, New Zealand, and even in North America.

Black Tern. *Hydrochelidon nigra* (Linn.).

A passing visitor to the south of the county in spring and autumn, at intervals of about ten years, appearing in vast numbers at the latter season. Some were obtained in 1839, on the Exe estuary, near Topsham (F. W. L. R., MS.). In 1849 a large flight of young birds came up the Exe as

far as Exeter in September, and numbers were knocked down by boys with their caps and sticks (R. C.). Immature birds were plentiful at Exmouth and at Plymouth in Sept. 1866 (E. P., Trans. Devon. Assoc. viii. p. 302; J. G., Zool. 1866, p. 500); and many came up the Exe as far as Stoke Canon in Sept. 1868. Some were seen on Torbay, Sept. 1st, 1869 (Zool. 1869, p. 1917).

Adult birds are much rarer, but in April 1852 we saw in the flesh several that were killed on the Exe estuary, near Topsham. A flock appeared on the Axe at Seaton in April 1866 (J. G., MS. Notes), and an adult was killed on the Avon in the parish of Aveton Gifford on April 30th of that year, and another at Salcombe a few days after (H. N., Zool. 1866, p. 526; R. P. N. and E. A. S. E., MS. Notes). A pair were obtained at Plymouth, May 9th, 1867 (B., MS. Notes). An adult was killed on a pond near Colmer, April 22nd, 1890 (E. A. S. E.).

The bird killed on the estuary of the Axe in July 1869 was probably an example of this species, and not a "Sooty Tern" as stated by Rev. J. B. Selwood ('Field,' July 17th, 1869). The time of occurrence is, however, very unusual. Montagu met with a specimen of the Black Tern at the beginning of Nov. 1802 in Devonshire (Orn. Diet.), and one is said to have occurred near Exeter in the winter of 1848 (W. R. S., Zool. 1849, p. 2385).

This small species of Tern is a regular autumnal visitor to the North Devon estuaries, where it may be observed in company with other Terns, or flying over the small pools in the salt-marshes adjoining the rivers, presenting some resemblance to a large Swallow. We never saw any in the spring in North Devon in the complete black plumage, but have received examples from the Somerset peat-moors. Those which visit our waters in the autumn are chiefly young birds in immature plumage, with a few adults in a transition stage between the spring and winter dress. In 1859 large flights appeared on the sand-flats at Barnstaple.

In Cornwall Mr. Rodd states that it is rare in the spring, but he himself received three in full black dress which had been shot on a pond near the Land's End in April. In the autumn it is not uncommon on the coast. In Dorsetshire it is an uncertain visitor in the spring and autumn, and rather scarce. We have frequently seen young Black Terns in September, flying over pools by the side of the Somerset Axe near Weston-super-Mare.

The Black Tern used formerly to nest on many of the fen-lands in the Eastern Counties, where it was well known as the 'Blue Darr,' by which name it was reported to us as breeding on Otmoor, a fen not far from Oxford, in our undergraduate days. There are none nesting anywhere in England at the present day, but throughout the Continent the Black Tern is found as an abundant breeding species on most suitable marshes.

Subfamily *LARINÆ*.

THE GULLS.

The Devonshire coast is never without numerous Gulls to lend the charm of bird-life to its beautiful scenery. There are four species resident with us—the Greater and Lesser Black-backed Gulls, the Herring-Gull, and the Kittiwake. The Herring-Gull is to be seen on both the north and south coasts every day in the year, while the Kittiwake, abundant throughout the summer in the northern waters of the county, because of its great nesting station on Lundy Island, is numerous in the sounds and bays of the south only in the autumn and winter, in which, after stormy weather, the Black-backed Gulls also make their appearance. Our native Gulls receive large reinforcements from other species in the autumn, which pass the winter in their company, and in October such bird stations as Torbay and Plymouth Sound are teeming with Gulls, Skuas, Shearwaters, Divers, Scoters, Wild Duck, and Wigeon. The Common Gull and the Black-headed Gull are very numerous as winter visitors, while a season seldom passes without the southern estuaries being tenanted by some of the fine Polar Gulls, such as the Glaucous, and its smaller relative the Iceland Gull. After severe October gales the rarer Sabine's Gull, a small and beautiful species from the regions of snow and ice, is occasionally seen, while the still smaller species, no larger than an ordinary Pigeon, the Little Gull, is then not unfrequently obtained. Devonshire can also boast of possessing the only British-killed specimen of the Great Black-headed Gull; and the rare Ivory Gull has occurred also but once. Directly the tide goes out and leaves the sands and mud-flats uncovered, the Gulls flock to them in numbers, and

may be seen dotted about in all directions searching for food; as the flood again comes in they retire to the cliffs or pass the time floating gracefully on the surface of the water, some of them following the advancing tide far inland, on the chance of its disturbing anything from the mud which may provide them with prey. A common sight of a still evening are the long lines of Gulls beating with measured flight along the shore as they seek their favourite roosting-places on some distant cliffs. Often the Gulls are to be seen wheeling in the air far inland, when their presence is considered to be portentous of storms. Often, too, those which are not strictly oceanic species may be noticed on freshly ploughed fields in the winter and spring in company with Rooks and Starlings in search of worms, or following close behind the plough, contending with one another for any spoils it may bring to light. All the Gulls are birds of singularly graceful and buoyant flight, and their snowy forms are an adornment to the marine landscape, whether they are beheld soaring over the blue waters, or perched upon the shore, or skirting the cliffs. The old birds are always to be known by their pure white tails and grey or black mantles; the younger birds are brown, and take three years before the last dark bars disappear from their tails—the least trace of a band upon the tail being an invariable sign that the adult plumage has not been fully reached. Some of the Gulls nest upon the ledges of the cliffs facing the sea (Herring-Gull and Kittiwake); others upon the shelving ground on the top (Greater and Lesser Black-backed Gulls); while the various Black-headed Gulls breed in society (in “Gulleries” as they are termed) and place their nests upon the ground in marshes; the Common Gull also nests in preference upon the ground at the edges of lochs. The eggs, generally three in number, are characteristic and beautiful,

varying greatly in size and colour—olive, stone, and green being the ground-colours, on which are more or less numerous spots and blotches of dark umber-brown. Occasionally varieties are met with which are either red all over, or green, without a single blotch. The young birds are covered with down when they first emerge from the shell, and remain for some little time in the nest.

Ivory Gull. *Pagophila eburnea* (Phipps).

An accidental visitor, of extremely rare occurrence. The snow-white plumage of this beautiful Gull when adult sufficiently indicates that its abode is among the Polar ice, and few have seen it in its home beside the whaler or the Arctic explorer. Very rarely indeed it strays to the south, and the only Devonshire example we know of was shot when in an exhausted condition at Torquay on January 18th, 1853, and is now in the Torquay Museum, where we have examined it, finding it to be in the immature spotted plumage (E. B., Zool. 1853, p. 3807). According to Dr. Bullmore, an Ivory Gull was seen by Mr. W. P. Cocks near Falmouth on Feb. 13, 1847, and one was shot near Quilquay, by Mr. Olive, watchmaker. Mr. E. H. Rodd had one in his collection, in immature plumage, which was shot from the Pier Head, Penzance, two days later than Mr. Cocks had seen his bird at Falmouth, and probably was the same. Mr. Cecil Smith states that Mrs. Turle, who some years ago stuffed birds at Taunton, “had one or two Somersetshire specimens of this bird through her hands, one of them killed, I think she told me, in the marsh when it was flooded: but I am not quite certain about this.” We never saw either of these specimens, nor do we know to whom they belonged. Vast numbers of Gulls collect in the bay at Weston-super-Mare, following the schools of sprats which are abundant in the muddy shallows in the winter-time, and many are caught in gins baited with fish and placed upon the rocks, and in this manner, in the winter of 1864, a beautiful adult Ivory Gull was taken, which was kept alive for some time by Mr. Augustus Stone, a bird-stuffer in the town. Unfortunately, this most interesting bird was found one day dead in a fresh-made heap of mortar, with its plumage completely ruined. Within the last fifty years, according to Mr. Mansel-Pleydell, six examples of the Ivory Gull have been secured on the Dorsetshire coast, but it is not stated in what plumage.

The Ivory Gull nests in the extreme north, and its eggs are almost unknown to collectors.

Kittiwake. *Rissa tridactyla* (Linn.).

[Hackett or Hacket Gull, Tarroek (young).]

Resident and abundant, breeding in large numbers on Lundy Island,

where it is a summer visitor, the eggs being laid at the end of May. It is most numerous on the south coast of the county in autumn and winter, appearing in large flocks in October and November, especially when sprats are on the coast. It leaves Plymouth Sound at the end of February. Large flocks frequent the estuaries in a starving condition after long-continued gales (J. G., *in litt.*; Zool. 1873, p. 3446) This species, however, usually keeps more out at sea than the Black-headed Gull, feeding more generally on small fishes than that species. We have never seen any Kittiwakes on the fields inland in company with other Gulls, and believe it to be quite an oceanic species. Sometimes these Gulls are blown far inland in winter, and on the coast of North Devon Kittiwakes are often found dead on the sands after a heavy gale at midsummer (M. A. M., Zool. 1859, p. 6762), and on the south coast after winter storms. Strangely enough, Montagu met with this bird only once in the South of England, when three were thrown up by the tide in March 1806 on the south coast of Devon (Orn. Diet.).

The Kittiwake is the most numerously represented of all the Gull family upon the Devonshire coasts, on some portion of which it may be seen throughout the year. In the summer-time great numbers may be encountered on Barnstaple Bay, or may be seen wheeling about the entrance of Ilfracombe Harbour. After heavy autumnal gales we have found the sands off the Braunton Burrows and the shores of the Barnstaple river strewn with the bodies of drowned Kittiwakes; cartloads might have been gathered. Great numbers of Kittiwakes nest on Lundy and also on the Scilly Islands, and we are informed that a few nest on the cliffs of the Land's End, and in 1873 Lord Lilford found a pair with young, nearly full fledged, on the Cod Rock, off Berry Head, on the South Devon coast. Immense numbers nest on the northern side of the Bristol Channel, on Skomer and Ramsey Islands, off Pembrokeshire. In the winter-time great flocks of Kittiwakes appear along the Cornish coast, entering fearlessly into the harbours, and Mr. Rodd considered these Gulls were, next to the Black-headed Gull, the most numerous Cornish species. Both on the North Somerset and the Dorset coast Kittiwakes congregate in the bays and harbours in pursuit of the sprats, and numbers of these poor birds are cruelly caught in baited gins by boys, and hawked about*.

We have visited various breeding-stations, containing countless nests; they are generally constructed of seaweeds, which, after a time, become almost cemented together by the droppings of the birds. The eggs vary greatly in size, shape, and markings, and very pretty varieties may be picked out.

The young birds in their first plumage are called "Tarrocks," and as they are flying seem to have a black collar round their necks. The Kittiwake is usually distinguished from all the other Gulls through the absence of a hind toe. Mr. Gatcombe, however, in October 1886, met with a

* For an interesting account of the barbarous slaughter of Kittiwakes at Lundy Island, for the sake of their wings for ladies' hats, see Yarrell's *B. Birds*, 4th ed. iii. p. 653.

specimen which had a small but perfect hind toe and claw, one eighth of an inch in length (Zool. 1887, p. 377). The Common Kittiwake of the Pacific coast (*L. tridactyla kotzebuii*) has the hind toe better formed—sometimes (according to Dr. Coues) almost, if not quite, as long as in ordinary Gulls, with a nearly or quite perfect, though small, claw. Possibly Mr. Gatecombe's bird may have been an example of the Pacific form, and may have reached us by the same route by which so many other American birds have come to us, namely, by the northern coasts of Asia and Europe.

Glaucous Gull. *Larus glaucus*, Fabr.

[Great White-winged Gull.]

A casual visitor, of occasional occurrence in harbours and river estuaries from January to March. It is most frequently seen in Plymouth Sound (where it was especially numerous in the early months of 1872 and 1873) after severe gales. The specimens obtained are mostly immature; adults, however, are not very rare. This fine Gull sometimes remains until far on in the spring; the latest noticed by Mr. Gatecombe was on April 30th, 1875, when one occurred in Plymouth Sound (Zool. 1875, p. 4491), but Dr. E. Moore records an adult killed at Mutley, near Plymouth, feeding on carrion, on May 21st, 1832 (Mag. Nat. Hist. 1837).

This splendid Gull is, from its size and courage, the tyrant among the countless wild-fowl which in the short Arctic summer frequent the Polar seas, preying upon the smaller species, the Little Auk especially, and gaining for itself the name of "the Burgomaster" from the whalers. It is, like the Fulmar and other Gulls, very fond of the blubber of the whale, and two in our possession, one an adult and the other in immature plumage, were killed at one shot when feasting on a stranded whale on the Orkney coast. The Glaucous Gull is not an uncommon winter visitor to the South Devon waters, numbers having been observed and recorded off Plymouth in various years by Mr. J. Gatecombe, and a very interesting particular mentioned by that gentleman is the late date in the spring on which he has occasionally noticed this fine Gull, as well as the smaller and rarer Iceland Gull. On the North Devon estuaries the Glaucous Gull is rare, and we know of only two examples having been obtained, both in immature plumage; one of these, shot at Instow, is in the Museum of Westward Ho! College, as we are informed by Mr. A. H. Evans. At Weston-super-Mare this Gull is not very rare, and several have been obtained in the winter-time, having come into the bay after the sprats with countless other Gulls. Mr. Augustus Stone, the local bird-stuffer, possessed a very beautiful example, which, Professor Newton was kind enough to inform us, was evidently a very old adult. In this bird the mantle was silvery white, instead of being the usual pale French grey.

Specimens were obtained at Plymouth, Jan. 7th and 10th, 1860; one Jan. 1863; one Feb. 20th, 1868; many old and young in February, and one in March, 1872; an adult killed Jan. 1st, and several old and young seen in Jan., Feb., and March, 1873; one

April 30th, 1875; Jan. 6th and 14th, 1877; an adult seen March 29th, 1879; an immature bird April 9th, 1881 (J. G., MS. Notes; Zool. 1872, p. 3051; 1873, p. 3445; 1875, pp. 4371, 4491; 1876, p. 4798; 1877, p. 163; 1879, p. 208; 1882, p. 63; J. J. R., Zool. 1863, p. 8448).

Only one specimen has occurred in the Kingsbridge estuary (H. N.).

This Gull was met with in Torbay in the winter of 1854; 1867-8; Jan. 1869; and on Feb. 8th, 1871: two of the specimens obtained being adults (Zool. 1869, p. 1846; 1871, p. 2631; 1874, p. 3908). The Iceland Gull recorded in the 'Zoologist' for 1868, as killed in Torbay, was a Glaucous Gull in adult plumage (J. H. G., Zool. 1871, p. 2631).

An immature bird occurred on the Teign in Jan. 1877 (Zool. 1877, p. 108).

On the Exe estuary it is rare; Mr. Ross and Dr. W. R. Scott had specimens, and one was killed at Exmouth, Jan. 3rd, 1872, and an immature bird near Topsham, Jan. 20th, 1877 (Zool. 1877, p. 108). We saw one at Exmouth in Jan. 1889.

One was killed at Budleigh Salterton in the winter of 1847 (W. B. S., Zool. 1849, p. 2385) and one at Beer, March 17th, 1883.

The Glaucous Gull is, apparently, very rarely seen on the Dorsetshire coast, as Mr. Mansel-Pleydell can enumerate only three examples. In Cornwall, according to Dr. Bullmore, it is occasionally seen in Falmouth Harbour, and Mr. Rodd had a splendid example in his fine collection which was shot in Mount's Bay early in April 1872; and two were shot at Hooe as recently as December 1891. The Glaucous Gull breeds commonly in Greenland, and its fine eggs are well known to collectors.

Iceland Gull. *Larus leucopterus*, Faber.

[Lesser White-winged Gull.]

A casual winter visitor, occurring occasionally on the south coast of the county from October to February, sometimes lingering to April and May. The specimens obtained are most frequently immature. It appears to have become since 1855 a more frequent visitor to Plymouth Sound, where before that year one in Dr. E. Moore's collection was the only example known to have been procured.

The Iceland Gull is a smaller edition of the Glaucous Gull, which it closely resembles in plumage, and is also an inhabitant of the far north, coming very rarely to our southern waters, where it is a much less frequent visitor than its larger ally. We have never known an instance of its occurrence in North Devon. On the bays and sounds on the south coast of the county it has been noticed occasionally, and in the winter of 1874-75 was numerous. Mr. J. Gatecombe supplied the following note respecting its occurrence that winter in the neighbourhood of Plymouth to Mr. Dresser:—"Owing to the long-continued gales, I suppose, last winter produced more of this species on the coasts of Devon and Cornwall than were remembered ever to have appeared before—numerous specimens, both of young and *adult*, having been seen and obtained on the coasts and in our harbours. A specimen or two of the immature might be occasionally seen on the coast, but the adult very rarely. There seems to be a regular gradation in size between this species and *Larus glaucus*, as I have seen

Larus leucopterus from the size of the Common 'Mew' up to that of a small Glaucous Gull" (Dresser, 'Birds of Europe,' vol. viii. p. 440).

At Plymouth one was killed by the Rev. R. A. Julian on the Laira, Jan. 30th, 1856, and one occurred in the Sound, Nov. 26th, 1861; a bird of the year in December 1862 (J. J. R., Zool. 1863, p. 848); one at Membury, April 28th, 1866; one Jan. 25th, 1867; one Dec. 6th, 1869; one Feb. 4th, 1872; an adult Nov. 27th, 1873; one nearly adult Dec. 1st, 1877; one May 14th, 1878; one Jan. 25th, 1883, after a very strong wind from S.S.E. (J. G., MS. Notes; Zool. 1855, p. 4705; 1862, p. 7848; 1870, p. 2027; 1872, p. 3012; 1874, p. 3826; 1877, p. 132; 1878, p. 419; 1883, p. 166; and 'Naturalist,' 1855, p. 144; C. S., Zool. 1882, p. 71).

Immature specimens occurred in Torbay in Oct. 1844 (W. S. H., Zool. 1845, p. 879); in 1851; March 23rd, 1868, nearly adult (J. H. G.); and in the autumn of 1871 (Torquay Museum).

On the Cornish coast the Iceland Gull has also occurred occasionally. Dr. Bullmore reports two obtained in Falmouth Harbour—one shot from the North Quay on April 24th, 1863, the other on Jan. 6th, 1864,—and mentions a third obtained in the *summer* of 1868. The first two were both in immature plumage, in which state the majority of those obtained in the south occur. Mr. E. H. Rodd records an immature Iceland Gull shot on the Scilly Isles in the *summer* of 1852, another from Mount's Bay, also in immature plumage, in April 1872, and states that a number of these Gulls, all apparently young birds, appeared on the coast of Cornwall in January and February 1873, and were especially numerous in Lamorna Cove, about three miles from Penzance.

In Somerset the Iceland Gull has been procured several times in the winter at Weston-super-Mare, whence Mr. Cecil Smith received a very fine example in immature plumage, which we examined in the flesh; this bird was obtained on Dec. 28th, 1870. He has also recorded in the 'Zoologist' (1882, p. 71) an Iceland Gull which occurred many miles inland at Somerton on Dec. 12th, 1881, which was made into a fire-screen! It is a little singular that Mr. Mansel-Pleydell can mention no instance of this Gull from the Dorsetshire harbours.

The Iceland Gull occurs sometimes very abundantly in the winter off the coast of Scotland, and breeds numerously in Greenland.

Herring-Gull. *Larus argentatus*, Gm.

[Ladram Gull (on the Exe); Wagel (young).]

Resident. Breeds in considerable numbers on the cliffs along the south coast from Sidmouth to Plymouth. One of these breeding-places is at Ladram Bay (between Sidmouth and Budleigh Salterton); another at Berry Head; and another at Wembury, at the mouth of the river Yealm, near Plymouth.

On the north coast the great breeding-stations are Baggy Point and Lundy Island. Mr. Gatecombe says that this species lays from April to the end of July at Wembury, and that the first young birds are seen in August in the Sound (Zool. 1877, p. 280; 1878, p. 430, &c.). We saw

some nestlings in the down, and a few eggs, on the cliffs at Wembury on June 15th, 1883, when we visited that interesting locality with Mr. Gatcombe and Mr. J. Brooking-Rowe. There were then fifty pairs of adults flying about the bold cliffs. Formerly this Gull bred in great numbers at Ladram Bay, and the boatmen on the Exe are wont to term the young birds "Ladram Gulls." Many still frequent the Red Sandstone cliffs there, and a few may be seen at the mouth of the Otter. The Herring-Gull varies greatly in size. One as large as an ordinary Great Black-backed Gull occurred at Plymouth, Feb. 3rd, 1876. The wing measured 19 inches from the carpal joint (J. G., *in litt.*, and Zool. 1876, p. 4901). We saw one of this size near Exmouth, July 20th, 1887.

This beautiful species is very common throughout the year all round the coast of Devon and Cornwall, and, to the eyes of the naturalist, lends by its presence an additional charm to many a picturesque and rocky shore. From the Tors at Ilfracombe, the Castle Rock in the Valley of Rocks at Lynton, from many a dark cliff on the North Cornwall coast, from the Land's End itself, and along the tamer coast-line of the south, we have watched the Herring-Gull as it sailed in circles overhead clamouring angrily, or swept with measured flight along the cliff either up or down the channel according to the tide. However wild and delightful the coast scenery and refreshing the breeze which came to us off the sea—however gladly we hailed again those sweet scents of cliff-flowers which can only be inhaled upon the shore,—had the Gulls been wanting we should have felt that something was missing to complete the enjoyment of the landscape which their presence, as tiny specks of white on the sea below, on the shelving ledges of the cliffs, or in the air above, rendered perfect to our sense. We have never realized the charm given to cliff scenery by the Gulls more fully than at Tintagel. Passing through the churchyard, where the graves were covered to the depth of a foot or more with lady's bed-straw (*Galium verum*) and the air was perfumed from its golden blossoms, we left the lonely church, and came out on the side of the cliff with the wild promontory on which one part of the old castle stands immediately before us. It was a glorious July day; the sea beneath caught the sunlight and answered back with "countless laughter"; the scent of the sea-pink wafted on all sides was itself a delicious reminder that we were on the coast; the strange old-time ruins above us on the mainland shimmered in the sun; a few Kestrels were poising themselves across the deep blue of the sky; and the silvery Herring-Gulls were sailing solemnly along in little parties of three or five but a few feet above the ground, all heading to the north, and seeming to follow without any deviation the line of flight which their predecessors had taken, which tracked all the windings of the cliffs. Slipping quietly a little further down the steep hillside, we placed ourselves beneath this aerial path which the birds had chosen, and sitting close behind one of the ruined walls of the old castle we soon had some of the Gulls passing overhead, and so near did they come that had we stretched out our walking-stick it seemed as if some of them might have been touched upon the breast. They took but slight notice of us; one or two gave us a grave

glance as they sailed on ; and so still and silent were they that we thought there was something ghostly about them ; they might have been the transmigrated Knights of the Round Table keeping watch over the scenes of their former revels. Another spot on which to see the Herring-Gull to perfection is Baggy Point, the eastward boundary of Barnstaple Bay. This is a favourite breeding-station of the birds, and in June we have often enjoyed a peep over the edge of the cliff at the numerous nests on the ledges below. The Gulls have noisy neighbours in the chattering Jackdaws and in a pair of Peregrines, which continually dart backwards and forwards above the cliff, screaming loudly their anger, doubtless excited by our presence. The Herring-Gull is almost omnivorous ; nothing seems to come amiss to it. It is very destructive to young rabbits in warrens bordering on the coast, and as it has increased enormously in numbers in some places, owing to the operation of the Sea Birds' Preservation Act, we know of warrens which formerly used to produce many thousands of rabbits during the season, but which now do not yield as many hundreds. The evil character it bears in Scotland, owing to its eating eggs and young grouse upon the moors near the coast, is probably well-earned. We have already related how every Woodcock which, shot on the sidlings on Lundy, chanced to fall over the cliff into the sea would be espied by the watchful Gulls that would swoop after it, and as soon as the dead bird touched the water a great scramble ensued as to which of them should first seize upon and devour it. Tame Herring-Gulls kept in gardens are good vermin-killers, and are very clever in pouncing upon and killing rats in particular. Col. Montagu noticed that his tame Herring-Gulls had a trick of treading the earth with their feet in order to induce worms to come forth for them to eat ; we have already recorded this as a habit with Woodcock and Snipe. Almost every day in the year Herring-Gulls and Kittiwakes, with an occasional Black-backed Gull, may be seen hunting about the mouths of the drains outside Ilfracombe Harbour in search of any garbage which may serve as food. In the spring the Herring-Gulls come some miles inland to visit the freshly-ploughed fields and the water-meadows, and their presence any distance from the coast is always considered ominous of stormy weather. Some tame Herring-Gulls kept by Mr. Cecil Smith used to lay eggs in the spring ; but we do not believe that they ever hatched any off, as the birds either devoured the eggs themselves or they fell a prey to the rats.

[*Observation.*—Another species of Herring-Gull, namely *Larus affinis*, Reinhardt, is not unlikely to visit the British Islands, as Mr. Gütke has obtained it at Heligoland. It is a native of Northern Siberia, and passes the winter in South-eastern Europe, North Africa, India, &c. The mantle is dark slate-colour (resembling pale examples of *L. fuscus*), and the legs and feet are yellow as in that species, and not flesh-colour as in the Herring-Gull, but the foot is larger in proportion than in the Lesser Black-backed Gull, and the pattern of the outer primaries is different (Yarrell's B. Birds, 4th ed. iii. p. 621).]

Lesser Black-backed Gull. *Larus fuscus*, Linn.

Resident; breeding in small numbers on Lundy Island and in places along the north coast as far as Lynmouth. The late Mr. Gatecombe informed us that the Rev. R. A. Julian must have made a mistake in stating that he found this species breeding on the cliffs at Wembury on July 4th, 1852 ('Naturalist,' 1853, p. 117), as the Herring-Gull is the only species that breeds at that locality. Adults in pairs are, however, seen in nesting-time about the coast between the Bolt Head and Bolt Tail, where there are suitable grassy slopes for them to breed upon (R. P. N. and E. A. S. E., MS. Notes). This Gull is most numerous on the south coast and its estuaries in winter and spring after storms. It is a spring visitor to Plymouth Sound, appearing usually at the end of March, and keeping in pairs. Adults leave the Plymouth waters by the 1st of May, but immature non-breeding birds are seen in flocks sometimes as late as June; the breeding birds return again early in August with their young (J. G., Zool. 1872, pp. 3051, 3101, 3150; 1874, p. 4228; 1875, p. 4449; 1878, p. 55). Mr. E. A. S. Elliot has seen birds of this species on the coast at Thurlestone in May, and some at Bantham on Aug. 24th, 1878. Mr. J. H. Gurney shot one on the Dart April 10th, 1866 (*in litt.*). Mr. Stevenson found it on the Teign in winter and spring after storms (Zool. 1859, p. 6794). We observed a large flock of adults and young off Teignmouth on Aug. 24th, 1874. A very beautiful specimen was shot at Salmon Pool, just below Exeter, March 31st, 1876, and one at Stoke Canon, May 3rd, 1884, after stormy weather, but it is a very scarce species on the Exe estuary. Mr. O. V. Aplin saw flocks off Morthoe, North Devon, in August 1886 (Zool. 1887, p. 71).

This Gull is a resident throughout the year on the Devonshire coast, but is never numerous. We have found it nesting on the cliffs in the neighbourhood of Lynmouth, and a few pairs breed on Lundy Island. On islands which we have visited at the nesting-season we have always found the Lesser Black-backed Gull breeding in little communities by itself, and there is never the least difficulty in examining the eggs (of which very pretty varieties may be obtained), as the nests are placed among the grass and fern on the top of the cliffs. The Lesser Black-backed Gull does not very often come inside the estuaries, keeping to the cliffs and the salt water. In the spring pairs may be seen commonly feeding in the water-meadows, where they are very wary, keeping well out in the centre of the fields, and frequently flying from one to another with somewhat musical and laughing notes. We have a splendid adult and a young bird in its second year's plumage which we secured at the same shot as they were feeding on a splashet in North Devon, after having waited patiently for them for a long time in a hedge with a heavy duck gun.

Mr. Rodd states that this Gull is seen on the Cornish coast in flocks in the winter and spring, but does not specify any nesting-station; and although Mr. Mansel-Pleydell supposes that it may breed on the Portland and Purbeck cliffs, he was without any positive information on the point. On the North Somerset coast this Gull (in our experience) is rather rare.

Like the Herring-Gull, the Lesser Black-backed Gull is a great robber of other birds' eggs.

Common Gull. *Larus canus*, Linn.

[Sea Mew, Winter Mew, Barley Bird, Long-winged Screamer (on the Exe), Cuddy Noddy (young): *Dev.*]

An autumn and winter visitor to our estuaries, from August to the middle of April, when it leaves us for its breeding-places. In early spring small parties fly far inland, following the ploughs and feeding on the worms and grubs turned up. The Common Gull was formerly numerous on the Exe estuary in the autumn and winter months, constantly feeding on the fore-shore at low water, above Topsham. Some fifteen years ago, however, it had become so scarce that we had great difficulty in procuring a specimen. Latterly it has increased again, and is now as plentiful as ever. Adults are seen on the Exe in breeding-plumage in April. Mr. Gatecombe observed that in 1876 this species was rather more abundant than it had been for some years at Plymouth. It was plentiful in the harbour in March 1877, March 1878, Nov. 1879, and March 1883 (mostly in pairs) (*Zool.* 1877, pp. 45, 279; 1878, p. 249; 1880, p. 48; 1883, p. 419). Mr. R. P. Nicholls informed us that he had never seen a specimen in summer plumage at Kingsbridge; a few immature birds sometimes remain there till May, or perhaps later. This Gull is common on the Teign (*H. S.*, *Zool.* 1860, p. 6793; and *C. S.*); and is said to be an occasional visitor to Lundy Island (*Trans. Devon. Assoc.* vol. viii. p. 309).

The nesting of the Common Gull in Devonshire, recorded by Mr. A. G. More in his interesting paper in the 'Ibis' (1865, p. 455) on the distribution of British birds during the breeding-season, is of course erroneous, as this species, as is now well known, does not nest south of Scotland, and we regret to have been amongst those who led Mr. A. G. More astray. The Common Gull makes its appearance on the Devonshire coast in the autumn, and during the winter we have seen it in extraordinary numbers on the sand and mud-flats on the Exe and Teign. In North Devon it is also very common, and is the most numerous of the Gulls which come inland to seek for food on the freshly ploughed fields, for this reason getting its name of "Barley Bird," because it is seen about the fields as late in the spring as the season of barley sowing. Even Col. Montagu supposed that the Common Gull nested in the south, and writes: "We saw some hundreds sitting on their nests in an island off St. David's (Ramsey I.); the nests were made of seaweed, and were placed near together about fourteen feet from the beach." These were, of course, Kittiwakes' nests. Col. Montagu states that Common Gulls "flock with Rooks in severe weather, and follow the plough for the sake of the larvæ of the chaffer and worms." The changes of plumage in the various Gulls, as they pass year after year from the buffish brown of the nestling stage towards the gradual assumption of the grey mantle, white head, tail, and underparts of the adult state, have proved a great puzzle to ornithologists,

who are now agreed that the full adult dress is not reached until the third spring: and as the birds moult twice each year it would not be until after the sixth moult that the perfect plumage is attained, and even then, after the full dress is reached, there is a further annual change, as the adults in winter-time, instead of having the heads pure white, have them streaked with dark grey.

In its second year's plumage the Common Gull was once considered a distinct species and given the name of the "Winter Gull." Col. Montagu greatly interested himself in the changes of plumage of the Herring- and Common Gulls, and by keeping live examples, and watching them through their various moults, solved the difficulties presented. This excellent naturalist thought that it was not until the *autumn* of their third year that these Gulls reached their complete plumage with perfectly white tails, and a Herring-Gull kept by him did not assume its full dress until its fifth year; but it is a matter of question whether birds kept in confinement are so regular and forward in the moulting-process as birds in a state of freedom.

The Common Gull is not one of those species which nest upon the cliffs, preferring a flat surface, generally by the side of some mountain loch, for its breeding-station. It makes rather a large nest upon the ground of grass, sea-pinks, &c., and its eggs, like those of all other Gulls, vary greatly in colour and markings. It breeds commonly in the north of Scotland; in a few places in Ireland; and is generally dispersed during the nesting-season over the north of Europe.

Greater Black-backed Gull. *Larus marinus*, Linn.

[Saddle-back (Exe), Cobb (*N. D.*).]

Partially resident. Some few pairs breed on Lundy Island, and it seems to have formerly nested on the cliffs at Bolt Head (Yarrell's *B. Birds*, 2nd ed. iii. p. 593).

The Greater Black-backed Gull is a winter visitor to the coast near Plymouth, and is most frequently seen after storms in winter and spring on the estuaries. It seldom flocks, being generally seen singly or in pairs. According to Mr. J. Gatecombe, the young birds usually arrive after Christmas, increasing in numbers until spring, when the adults appear in pairs, just before leaving for their breeding-places. This splendid bird is to be seen all the year on the North Devon coast, but never in any great numbers; sometimes a solitary one may be seen stalking upon the sands, at other times a pair, but it is rare to see more than two together. A pair or two nest on Lundy Island, but we have no knowledge of any breeding-station anywhere upon the mainland. Off the Lighthouse on Braunton Burrows, Herring-Gulls and Grey Crows used often to be seen engaged in carrying mussels up into the air and dropping them upon the rocks in order to break the shells, and we have frequently seen a Greater Black-backed Gull joining with them in this amusement. This large Gull is extremely wary, and an adult can be secured



J. G. Keenleyside, del. et. aed.

Mintern Bros., Chromo Lith.

GREAT BLACK-HEADED GULL.

Larus ichthyæetus, Pallas.

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only after a very careful stalk. One afternoon we came across two of them striking at something in a shallow pool left by the tide on the sands in the middle of the Barnstaple river, and, on going to see what it was, found that the Gulls had just killed a salmon of about eight pounds weight, and had already devoured its eyes. We appropriated the fish, and, carrying it home, had it cooked for dinner. The Greater Black-backed Gull is an omnivorous feeder, devouring any carrion it can find at the water's edge, also fish, birds, eggs, offal, &c., and is said to be very destructive to the eggs and young of Wild Ducks, especially those of the Eider. It is sometimes, but rarely, seen in fields some distance inland.

Some adults were seen at Plymouth on November 25th, 1876, after gales, and they were extremely numerous in January 1873 (J. G., Zool. 1873, p. 3445; 1875, p. 4449; 1877, p. 45; 1881, p. 195). Mr. E. A. S. Elliot had a very small specimen of this species brought to him in December 1890. It was only 26 inches in length, and the wing measured 18 inches; it had been shot outside Plymouth Sound.

A few visit Kingsbridge estuary in severe weather (E. A. S. E.). This fine Gull is occasionally seen on the Exe estuary in winter and spring. On February 24th, 1853, Mr. W. H. Beadon, when shooting on the mud-flats below Topsham, saw one of these Gulls attack and kill an Oyster-catcher, which he kindly brought to us. A large hole had been torn in one side of its body under the wing. Two splendid adults were shot at Exmouth at the end of December 1891.

According to Mr. Rodd, the Greater Black-backed Gull is not a common species on the Cornish coast, but is more numerous further to the east on the shores of Dorsetshire, breeding, Mr. Mansel-Pleydell states, on the rocky cliffs of St. Alban's Head and Gad Cliff; and one of the Poole gunners, firing one night with his big gun into a flock roosting on a mud-flat, imagining them to be Wild Geese, is said to have killed fourteen of these great Gulls at a single shot.

Great Black-headed Gull. *Larus ichthyaëtus*, Pallas.

An accidental visitor, of extremely rare occurrence. The only example hitherto recorded as having been killed in the British Islands was shot at Exmouth at the end of May, or beginning of June, 1859, by William Pine, a boatman employed by Mr. William Taylor, of Bridgwater, who was engaged in fishing for bass in the estuary of the Exe off Exmouth. It was in company with a flock of ordinary Gulls. Its remarkable size and appearance attracted the attention of the boatman, who, having his gun with him, singled it out, and fortunately obtained the bird (F. W. L. R., Ann. Mag. Nat. Hist. 3rd ser. vol. iv. p. 467, December, 1859; and Zool. 1860, p. 6860). Mr. Taylor presented this unique specimen to Mr. Ross, of Topsham, in whose possession we saw it on our return from Canada in October 1859. As the latter gentleman had not the least idea to what species it belonged, we persuaded him to allow us to take it up to London, and on 1st November following we showed it to Mr. G. R. Gray, of the British Museum, who at once led us to the only specimen of *L. ichthyaëtus* then exhibited in the galleries of that institution. A comparison of the two birds immediately proved their identity. At

Mr. Gray's request we left the Exe bird with him for exhibition. At the death of Mr. Ross's widow in 1865, his collection of birds was removed to Exeter, having been bequeathed to the Albert Memorial Museum in that city, and the Great Black-headed Gull accompanied it, and was under our care for nearly twenty years. The specimen is still in good condition, though, having been badly mounted at first, it had to be restuffed, and it has been much handled (W. D'U.).

This, the king of the Black-headed Gulls, has its home on the Caspian Sea, and it must have been a strange chance which brought one to the mouth of our Devonshire Exe, off Exmouth, at the beginning of the summer of 1859. No other example has been obtained in the United Kingdom except this very fine specimen, which is to be seen, rather indifferently stuffed, unfortunately, in the Museum at Exeter, where it is certainly one of the most interesting of the birds in the whole collection, and as a very important object in the Devonshire Ornithology we have selected it for one of our Plates. One example is said to have been shot some years since upon Heligoland, and is included in the list of birds obtained upon that wonderful rock by Herr Gätke. The Great Black-headed Gull is said to breed in colonies upon marshes like the Common Black-headed Gull, but its eggs are still rare in collections. We have been informed by Mr. J. H. Gurney that he was very disappointed when he first saw this Gull upon the wing in Egypt, where it is common, as it did not come up to his expectations with regard to its appearance or powers of flight, but seemed an awkward and lumbering bird. It is said to have a very harsh croaking note.

In the fourth volume of Dr. Bree's 'Birds of Europe,' there is a figure of the Devonshire specimen from the pencil of the Rev. F. Wright, of St. Stythians, Cornwall, which is an excellent rendering of the bird, but appears to us to be indifferently coloured, and, moreover, errs in the colour of the legs, which are given as a very pale red (there is the same mistake in Mr. Dresser's figure in his splendid work). It is true Mr. Ross himself, in the 'Zoologist' for 1860, p. 6860, has described the legs as "fuscous red," but must have done so in error, as such excellent authorities as Mr. Howard Saunders and Mr. Dresser both state they are yellow, or greenish yellow. This magnificent Gull has bright vermilion rings round the eyes. The beak is said to be yellow, with a broad red band across it, immediately followed by another of black at the tip (Dresser, 'Birds of Europe,' vol. viii. p. 369).

Black-headed Gull. *Larus ridibundus*, Linn.

[Peewit Gull, Maddrick Gull, Red-legged Gull.]

Very abundant in large flocks on the estuaries of the south coast in autumn, winter, and spring. Comparatively few are met with in summer, and Mr. J. Gatcombe had never met with one at that season (Zool. 1876, p. 4902) until July 26th, 1882, when he observed old and

young at Plymouth, and on July 18th, 1883, there were many on the St. Germans River which had already returned from their breeding-haunts (Zool. 1882, p. 459; 1883, p. 421). Montagu, however, observed some with black heads at the beginning of July on the south coast of Devon, and non-breeding birds remain on the Exe and Kingsbridge estuaries until the middle of May, and even later. The greater part leave Plymouth Sound by the middle of March (Zool. 1877, p. 279; 1878, pp. 52, 432), and Kingsbridge estuary as soon as they have assumed the black head (E. A. S. E.), but many adults remain on the Exe estuary till the middle of April. Mr. Ross, in his MS. 'British Laridæ,' says of this species "in large flocks on the Exe at all times of the year." There is, however, no breeding-place in Devonshire, but as a "Gullery" has been established on the north side of Poole Harbour ('Field' for February 23rd, 1884, p. 276), besides several others in Dorsetshire, the birds that frequent the Exe have not far to go in the breeding-season. Old birds, and young birds of the year, return from their breeding-places generally at the end of August or beginning of September, but sometimes by the middle of July. The birds of the year are occasionally, though rarely, obtained in the first autumnal moult in July and August, with much of the wood-brown colour of the first plumage remaining. Examples in this state of plumage obtained on the Exe on July 17th and August 4th, 1851, and July 19th, 1852, are in the A. M. M., and Mr. Gatecombe saw a very young bird which was obtained at Warleigh on the Tamar, early in August 1885 (Zool. 1885, p. 378). A bird in full breeding-plumage, but with a reddish-brown (not black) head, was killed on the Exe July 22nd, 1844 (F. W. L. R., MS. Journ. iv. p. 125). The small race or variety *capistratus* occurred on the Dart, December 1849 (A. N., Zool. 1850, p. 2825), and three at Torquay, January 4th, 1871 (J. H. G., Zool. 1871, p. 2631). The black head is sometimes retained very late or assumed very early in the season in this county. One with a dark head was shot on December 3rd, 1853; one was seen at Exmouth, December 21st, 1874, and numbers in November 1891; and one with entirely black hood on January 11th, 1875 ('Field,' January 23rd, 1875). About the middle of February is the usual time for the assumption of the black hood on the south coast of Devon. The adults are in their most perfect breeding-plumage early in March, and are usually in their winter plumage by October.

During the severe frost in February 1855 and January 1891, Black-headed Gulls entirely disappeared from the Exe estuary.

Although there is no Devonshire breeding-station of this very pretty Gull, great flocks arrive early in the autumn to spend the winter with us, and it is during the winter months very abundant upon our coasts, perhaps ranking next to the Kittiwake in numbers. Towards the middle of August we used to see the first arrivals of this Gull on the Barnstaple river, when a large flock, consisting mainly of young birds of the year in their pretty chequered plumage of light brown, grey, and white, made their appearance, and were very tame and confiding, more so than any other members of the Gull family. Throughout the winter numbers

might be seen on fields some miles inland, searching the ground in company with Rooks, Starlings, and Common Gulls. The old birds sometimes assume their breeding-plumage with the dark cap very early in the year. We have one, shot out of a flock in a ploughed field at the end of January, near Barnstaple, which is in complete nuptial dress. Great numbers of these Black-headed Gulls flock into the bay at Weston-super-Mare in company with the other Gulls after the sprats, and many are trapped. Mr. Cecil Smith had a very pretty flock of over a dozen, which he received from this watering-place, and it was an interesting sight to see them running about on his lawn and to watch the changes in their plumage. Col. Montagu states that he used to see this Gull in full plumage on the Devonshire coast in the beginning of July, and these were birds which probably belonged to the small "Gulleries" in the adjoining county of Dorset. The Colonel communicated a paper to the 'Transactions of the Linnean Society,' in which he traced this species through all its changes, from the nestling to the adult plumage, in order to prove that various other so-called species of Gull were only forms of it at different ages.

Mr. Rodd considers the Black-headed Gull the commonest of all the Gulls to be seen on the Cornish coast during the winter, and says that a few are to be noticed all through the year, and that some formerly nested on the Scilly Islands. In Dorsetshire, according to Mr. Mansel-Pleydell, it is increasing greatly in numbers every year as a nesting species, owing to the Sea Birds' Preservation Act.

The adults in their winter plumage have white heads, but always with a small black patch behind the ear; the same thing may be said of the winter plumage of adult Little Gulls, and it is probably a characteristic of the winter plumage of all the Black-headed Gulls.

There is not a more beautiful object in nature than an adult Black-headed Gull in its full breeding-plumage in early spring. The breast is suffused with a delicate rosy blush, which unfortunately soon fades after death, and the contrast of the blood-red bill, eyelids, legs and feet, the dark hood, and the snowy white and delicate grey of the rest of the plumage is truly exquisite, and fills one with regret that these evanescent charms cannot be preserved in all their pristine perfection. The distinctive mark of the species is that the central portion of the outer primaries is *always white*.

These Gulls nest in great communities on the fens, merely trampling the grass or rushes with their feet to form a depression in which to lay their eggs, and the young birds are taken and sold for the table, and are considered very good eating. The largest "Gullery" in England is the one at Scoulton Mere in the centre of the county of Norfolk, which forms the subject of the frontispiece (from a drawing by Mr. Wolf) to the third volume of the 'Birds of Norfolk.' From nine to ten thousand eggs are there taken annually, and are accounted great delicacies, being eaten cold like Plovers' eggs. Mr. Dresser states that where there are trees and bushes near their breeding-stations these Gulls commonly perch upon them.

Little Gull. *Larus minutus*, Pallas.

A casual visitor in autumn and winter, *i. e.* from August to February. The specimens obtained are generally in immature plumage. The Little Gull occasionally wanders inland, following the course of the larger rivers.

This, the smallest of the Gull family, with a body somewhat less than that of a common Blue-Rock Pigeon, although very rarely obtained in this country in full adult plumage, when it has a black cap upon the head, is not uncommon in the autumn and winter, large flocks occasionally appearing off the Yorkshire and Norfolk coasts. In Devonshire the greater number of the examples secured have been from the estuaries of the south coast; from North Devon, as far as we know, only three have been recorded, while at least thirty are said to have been obtained in the south of the county.

The Little Gull feeds upon small fishes and insects, pursuing and capturing dragonflies upon the wing.

The plumage of some immature specimens we have examined in the flesh was suffused with the same beautiful rosy tint as is seen in the Black-headed Gull in breeding-plumage, and also in some other Gulls and Terns; it soon disappears.

A Little Gull shot at Brent, South Devon, was in the British Museum. Another was shot September 28th, 1828, twenty miles up the Tamar, and another there in October 1831. Mr. Drew had two others (E. M., Trans. Plym. Inst. 1830, p. 338; Mag. Nat. Hist. 1837, p. 360). One shot in Plymouth Sound in February 1852 (J. B., 'Naturalist,' 1853, p. 204); one at Plymouth, December 24th, 1858 (B., MS. Notes); one January 1859; one, nearly adult, February 3rd, 1862; one December 31st, 1863, at Plymouth (J. G., MS. Notes; Zool. 1859, p. 6377; 1862, p. 7940).

One occurred in Torbay, November 1844 (F. W. L. R., MS. vol. iv. p. 159); two there January 1869 (Zool. 1869, p. 1720); one 12th February, 1870 (A. von H., Zool. 1870, p. 2098); one at Paignton (in Torquay Museum); one in Torbay, October 1876 (G. F. M., Zool. 1876, p. 5161).

One was killed at the mouth of the Teign, November 24th, 1866, in pursuit of sprats, in company with a large flock of Kittiwakes (C. S., Zool. 1867, p. 562). An immature specimen was obtained on the Exe estuary, November 28th, 1844 (F. W. L. R., MS. Journ. iv. p. 159). One was shot by Mr. G. C. Luke, January 31st, 1851, whilst feeding with two others in a turnip-field near Exeter (W. T., 'Naturalist,' 1852, p. 19); one was shot on the Exe, December 28th, 1855 (Zool. 1856, p. 5065); one October 27th, 1873; an adult at Woodbury Road Station, November 29th, 1876; two immature birds on the Exe, January 12th, 1877 (Zool. 1877, p. 104); another, January 17th, 1877.

A Little Gull was caught by a fishing-line at Beer ('Exeter Gazette' for January 13th, 1871). We saw a specimen in a bird-stuffer's shop at Seaton in 1883, which may have been this one.

Two, nearly adult, were shot on the sands near Braunton Burrows, August 30th, 1858 (Zool. 1858, p. 6245); and another there January 1869 (Zool. 1869, p. 1803).

The Little Gull has been seen at Lundy Island. The Rev. H. G. Heaven has informed us that one was seen beating about close in shore in October 1891.

On the Cornish coast the Little Gull also occurs in the autumn and winter, and Mr. Rodd states that both immature birds as well as adults

in their winter plumage (when the top of the head is white, and there is only a small dark spot behind the ears) have been frequently met with.

Mr. T. Cornish received a Little Gull from St. Just, near Penzance, February 15th, 1889, an adult, which weighed a little under 7 ounces, or about as much as would be scaled by an extra fine Common Snipe. Two more were seen between Hayle and St. Ives, and one of them, an immature bird, was shot on February 21st that same year (Zool. 1889, pp. 107, 234).

Mr. Mansel-Pleydell enumerates eight Dorsetshire specimens; one of them, shot March 22nd, 1862, was probably almost in full plumage. In Somersetshire we have known the Little Gull to occur in the autumn in the neighbourhood of Weston-super-Mare, and one was shot at Clevedon at the end of October 1888 (Zool. 1889, p. 32). We have ourselves a very pretty specimen of a young bird which was shot on the sands at Weston-super-Mare in a plumage closely resembling the "Tarroek" stage of the Kittiwake.

The summer home of this small species is to be found in South and Central Russia, the great lakes providing the nesting-stations. It is especially numerous on Lake Ladoga, breeding on the small islands in company with the Common Tern, its eggs very closely resembling those of that bird in size, shape, and in the colour of the markings; but, according to Mr. W. Meves, they are to be easily distinguished by the colour of the *yolk*, this being orange-red in the eggs of the Little Gull, and ochre-yellow in those of the Common Tern.

[Bonaparte's Gull. *Larus philadelphia* (Ord).

Three examples of this small Black-headed Gull, a common and beautiful North-American species of about the same size as Sabine's Gull, have now occurred in Cornwall: the first in Falmouth Harbour, January 4th, 1865; the second on the 10th January in the same year, near Penryn; and the third at Newlyn, near Penzance, October 24th, 1890 (Zool. 1891, p. 35). One of these Gulls has also been obtained near Belfast; another, a fine adult, in Scotland; and another at St. Leonards, in Sussex. Among the birds enumerated by Herr Gätke as having occurred in Heligoland is a single example of Bonaparte's Gull, shot in the winter of 1845. No other European specimens appear to have been recorded.

The three Cornish Bonaparte's Gulls were all in immature plumage, which closely corresponds with that stage of dress in all the other Black-headed Gulls. That obtained in Falmouth Harbour was examined and fully described by Dr. Bullmore, who gives its length as 14 inches (the length of the Little Gull is only 10 inches), and its weight as 7 ounces, and states that it exactly resembled the figure of the immature bird given in Yarrell.

This species is very abundant throughout North America and the United States in the autumn and winter, and goes very far north in the

summer to nest, breeding in colonies *on trees* near the Great Bear Lake, the nest being made of sticks, and throughout Arctic America, its eggs having been taken near Anderson-River Fort.

The last of the Cornish examples, shot at Newlyn, was examined by Mr. J. E. Harting, and exhibited at a meeting of the Linnean Society on 4th December, 1890.]

[*Observation.*—Besides the various Gulls we have enumerated, several others have occurred on British waters, but not in the South-west. These are the Laughing Gull, *Larus atricilla*, an American black-headed species, a single British example having been in Col. Montagu's collection, said to have been shot at Winchelsea so long ago as August 1774; the Adriatic Gull, *Larus melanocephalus*, a common Mediterranean black-headed species, of which an immature bird is said to have been shot at Barking Creek, January 1866; and, lastly, perhaps the most beautiful, as it is the rarest of all the Gulls, the Cuneate-tailed Gull, of Ross, *Rhodostethia rosea*, a rose-breasted species with white head, black collar round the neck, blue mantle and white underparts, with a white wedge-shaped tail having the two central feathers slightly elongated, which is a native of the Arctic regions, a very doubtful example of which is claimed from Yorkshire (Yarrell's B. Birds, 4th ed. vol. iii. p. 586); but very considerable doubt attaches to all these birds.]

Sabine's Gull. *Xema sabinii* (Joseph Sabine).

An accidental visitor, of rare occurrence, in autumn, and always in immature plumage.

This very beautiful Arctic species, which is only a trifle larger than the Little Gull, from which in all stages of plumage it is easily to be distinguished, both by its forked tail and by the form of its beak, has, according to Mr. Howard Saunders, only been obtained three times in the United Kingdom in its adult state (in which it has its head leaden black with a dark black collar around the neck), the last of the three having occurred after the heavy October gales of 1891, at Lymington, in Hampshire. In its immature plumage Sabine's Gull can hardly be considered as a rare straggler to our coasts in the autumn. We have ourselves detected examples of it in many West Country collections, where it was either labelled the 'Little Gull,' or was entirely unknown to its possessor. Mr. Cecil Smith possessed one in his collection which had been shot many years ago in South Devon. We have no information of any specimens from the North Devon estuaries, but feel certain they must have been occasionally visited by this small species of Gull, as examples have been more than once obtained some distance up the Bristol Channel. Thus, we ourselves examined three examples which were secured on the sands at Weston-super-Mare at different dates, and saw one of them alive on September 14th, 1867. On the afternoon of that day, when a strong westerly gale was blowing, we were walking up the sands and saw five

very small Gulls beating about the mouth of the Somerset Axe. A man who was loafing about with a gun walked down and shot one of them, which proved to be a very pretty example of Sabine's Gull in immature dress. This we secured from him, and have still in our collection. There is another, in very similar plumage, in the collection of birds presented by Mr. Horner to the Literary Institution in Frome, which we doubt not is a West Country specimen. Some nine or ten appear to have been recorded from the South Devon coast.

Two occurred near Brixham, Torbay, in October 1844 (W. S. H., Zool. 1845, p. 879). A bird of the year in Plymouth Sound in the autumn of 1866 (J. G., Zool. 1867, p. 557). Another was in the collection of the Rev. Alan Furneaux, of St. Germans, and is now in the Plymouth Athenæum. It was killed by a wild-fowl shooter at night amongst a flock of Curlews (J. G.). A young bird shot in Torbay a few years before 1862 was in the collection of the late Mr. Cecil Smith (M. A. M., Zool. 1863, p. 8448; G. F. M., 'Naturalist,' 1866, p. 360). Mr. E. Burt, Curator of the Torquay Natural History Society's Museum, knew of but two instances of its occurrence in Torbay in twenty-five years—the first being probably that mentioned above in 1844, and the second was an immature bird shot on October 23rd, 1866, out of a flock of Kittiwakes attended by Skuas by Mr. E. Schofield. Mr. Ross, in his MS. 'Journal of Occurrences in Natural History' (vol. iii. p. 4), and MS. 'British Laridæ,' figures a Gull with a slightly forked tail in immature plumage, which he says was common on the coast, and was known as the 'Sea-Pigeon' on the Exe. He considered it the young of Sabine's Gull.

Several examples of Sabine's Gull were obtained on the S.W. coast after the gales of October 1891. Mr. E. A. S. Elliot shot one on October 19th off Beesands in Start Bay, which was in company of a flock of Common and Arctic Terns (Zool. 1892, p. 34).

In Cornwall immature examples of Sabine's Gull are occasionally procured in the autumn. Dr. Bullmore received one or two from the neighbourhood of Falmouth, and Mr. Rodd (Zool. 1866, p. 501) described one which was knocked down with an oar on Mount's Bay as it was flying about with one or two others. In the museum at Truro we saw an immature example, without any label attached, which had probably come from Looe, the locality which supplied most of the marine birds to the collection. And Mr. T. Cornish (Zool. 1892, p. 22) records one which was shot at Newlyn by Mr. C. Vingoe, about the middle of October 1891. The same stormy month produced the example at Kingsbridge mentioned above, and another, October 13th, at Bournemouth (Zool. 1892, p. 22), which is reported as an *adult* in winter plumage. This example was picked up dead in a field, and, from the description given of it by Mr. F. Coburn, was a very interesting specimen: "the plumage on the whole of the underparts was beautifully suffused with salmon-pink, which was observable for several days after the bird had been skinned and mounted. The white tips to the black primaries have a twisted and worn appearance. The tail is not so acutely forked as shown in Yarrell's figure, while the sharp angle to the lower mandible was not at all observable in the fresh bird, but is beginning to appear as the bill dries." The colours of the soft parts, as given by Mr. F. Coburn, are: "Tibia, tarsus, and toes, also webs, pale drab colour, with a shade of umber at the joints and on the webs. Nails dark umber. Bill from base to a little beyond nostrils black, re-

mainder straw-yellow. Gape, and inside mouth and throat, bright reddish orange. Tongue pale orange-yellow. Eyelids black. Irides dark hazel." This must be considered as an addition to the three adult specimens known to Mr. Howard Saunders mentioned above. Mr. Mansel-Pleydell had no knowledge of any Dorsetshire example of Sabine's Gull.

This beautiful Gull was first made known through a pair killed by Captain Sabine on Spitzbergen, and to obtain its eggs the nesting-stations must be sought in the bleak regions of the Pole, either in Northern Siberia or in Arctic North America.

Its fork tail was considered by earlier ornithologists to show a link between the Terns and Gulls, but in the arrangement we are following the position assigned to this species, at the end instead of at the head of the Gulls, would seem to show that more recent systematists have abandoned this idea.

Subfamily *STERCORARIINÆ*.

THE SKUAS, OR PARASITIC GULLS.

There are four species of these singular raptorial Gulls which pass the summer in the north nesting upon the fells, and in the autumn come down our coasts on their migration to the south. Two of them—the Common Skua, or "Bonxie," as it is called in the Shetland Islands, and Richardson's Skua—nest on the islands to the north and north-west of Scotland; while the other two—the Pomatorhine and Buffon's Skua—nest in the northern countries of Europe, and are only more or less accidental visitors to our southern coasts in the autumn. But sometimes after heavy October gales Skuas are blown into the English and Bristol Channels in considerable numbers, and one reads of many being shot at the different watering-places. The Skuas are great bullies to the other Gulls, chasing them and robbing them of their fish, as we have witnessed in October in Torbay, where occasionally the Pomatorhine and Richardson's Skuas occur abundantly. They are also carnivorous, feeding on carrion, birds, and small mammals. Many names have been bestowed upon them: that of

Skua is said to be taken from "Skui, Skui," the cry of the birds; they are often called "Boatswain Gulls," from the long tails of all the species except the Common Skua, as if each bird was, like a boatswain, carrying behind it a marlingspike; and on Torbay the sailors give them the name of "Irish Lords," for a reason which it is easy to surmise. All four species have been obtained on both the northern and southern shores of the county, although in the fine estuaries and bays of the south they occur more frequently and in greater numbers. The eggs of the Skuas differ considerably, both in their colour and in the character of their markings, from those of the other Gulls, being reddish olive with only a few darker blotches upon them; and the nests are usually placed upon the ground, the Common Skua being the only one of the family which breeds upon the cliffs. Their plumage is singular, the adults having a few golden hackles upon the throat, with black caps on their heads, blackish or grey mantles, and white underparts, the central tail-feathers being considerably elongated. The young birds are first chocolate-coloured, and attain the adult plumage slowly, and do not gain it entirely until the third year. But the Common Skua is an exception, being always dark brown and fulvous all over in its plumage, and possessing certain of the characteristic yellow hackles upon the throat. The colour of the legs and toes in the Skuas also differentiates them from the other Gulls, whose legs are yellow, black, or red; while the Skuas have their legs bluish with the webs and toes black, so that one of the names given them by the earlier ornithologists was "Black-toed Gull" (Pennant). The Skuas also received the extraordinary name of "Dung-birds" (*Stercorarius*, Brisson), from the strange idea that when they were pursuing the Kittiwakes and Common Gulls for their fish it was for the purpose of feeding on

their mutings! Although all the Skuas are birds of the open sea, seeking the fishing-grounds far from the coast, and seldom, unless the weather is very boisterous, coming near the shore for shelter, we have instances of all four species having been met with far inland, driven in by the stress of severe autumn gales.

Common Skua. *Stercorarius catarrhactes* (Linn.).

[Tom Harry, Old Hen, *Dev.*; Bonxie (Shetland Isles), Great Skua.]

A casual visitor in autumn, winter, and spring, rarely approaching our shores, and generally keeping far out in the Channel. When obtained the birds are usually in an exhausted state, having been driven far inland by severe gales at sea.

This powerful and courageous bird nests on the Shetland Isles, where it will not suffer either the Raven or the Sea-Eagle to come near its station, and was fast becoming exterminated owing to the rapacity of "collectors" for its skin and eggs, but we are glad to hear that the landowners are now doing their best to preserve it. Like all the other Skuas it comes south in the autumn, and on 5th October, 1891, was seen in considerable numbers by Mr. G. F. Mathew, R.N., when passing in H.M.S. 'Tyne,' on the Burlings, some rocky islets 8 or 10 miles off the coast of Portugal, and again off Cape St. Vincent, on the ship's return voyage from Malta, on 25th of the same month. The Common Skua very seldom enters the estuaries, keeping well out to sea, and for this reason is not so often obtained as the other species, and may be considered a rare bird on the Devonshire coast. We have seen one which was shot some years since at Appledore, in North Devon, and a more recent specimen is said to have been obtained in a ploughed field close to Barnstaple. Some of the reported occurrences of the Common Skua are open to doubt, as we have known cases in which the Pomatorhine Skua in its first year's chocolate-brown plumage has done duty for it. Several examples have been procured in different years in the south of the county, a list of which we append below. Col. Montagu thought from the powerful talons of this species, and especially from the great strength and curved shape of the inner claw, that the Common Skua, instead of bolting its food whole, held it under its feet, like a Hawk, and tore it in pieces. We have failed to meet with any confirmation of this in any author, but have been informed by Lord Lilford that two Common Skuas from Foula in his aviaries "habitually stand upon and tear up their meat unless it is thrown to them in small pieces." He adds that they prefer flesh of birds or beasts to fish, though they eat the latter greedily. The Common Skuas at Foula are reported to catch great numbers of Kittiwakes, seizing them in their claws and carrying them off to devour. Lord Lilford's Skuas, soon after their arrival at Lilford,

"managed to drag a Teal (*Anas cyanoptera*) through the wires of an adjoining compartment, and devoured him like young Goshawks, with cries of exultation" (Lord L. *in litt.*). The Common Skua has been known to attack dogs, and even men, who have ventured near its nest, with the greatest fierceness, and has been seen to strike down a Herring-Gull, and Mr. Mansel-Pleydell relates an instance of one having been shot just after it had been seen to kill a Wigeon in Poole Harbour.

Dr. E. Moore says "a specimen was obtained here [Plymouth] by Mr. Drew in February 1830, and is now in his collection." He also states that this Skua frequently accompanies fishing-boats, and that "one was taken alive February 16th, 1835, having gorged itself from the Whale" (Trans. Plym. Inst. 1830, p. 339; Mag. Nat. Hist. 1837, p. 363). Bellamy says, on the authority of Mr. Gosling, that six were shot in the harbour at Plymouth in September and October 1831 (Nat. Hist. S. Devon, p. 215). The great Razor-back Whale was found floating dead, off the Eddystone, in October 1831. There would, therefore, appear to be an error in Dr. Moore's date unless some other whale is alluded to.

An adult was found dead in a field near Cullompton, twelve or fourteen miles from the coast, in 1848 (W. R. S., Zool. 1849, p. 2384). This specimen is now in the A. M. M. In April 1850, one was caught in a net near Plymouth (E. P., Trans. Devon. Assoc. viii. p. 298). One was picked up in an exhausted state on the rocks in Plymouth Sound, December 27th, 1852 (J. G., 'Naturalist,' 1853, p. 228). A bird said to have been a Common Skua, and recorded by us as that species, was shot by the late Charles Hall below Topsham on the Exe estuary, December 29th, 1855, having just struck down a Black-headed Gull, which it was engaged in devouring (Zool. 1856, p. 5065). It was purchased for Mr. Byne's collection, but the bird standing under the name of 'Common Skua' in that collection is a Pomatorhine Skua. In 1880 Mr. Gatcombe speaks of this fine species as "now unfortunately so rare on our coast" (Zool. 1880, p. 21).

Mr. E. H. Rodd writes:—"To see the Common Skua one must take a boat and put off a few miles from shore during the pilchard and mackerel seasons. A few pairs may then be generally observed, chasing and worrying the other Gulls to make them disgorge their prey." He also states that the fishermen occasionally catch these birds with a baited hook.

We have seen two specimens of this Skua in the Truro Museum.

We know of no record of a Somerset example of the Common Skua, but it is occasionally obtained off the Dorsetshire coast.

Pomatorhine Skua. *Stercorarius pomatorhinus* (Temm.).

[Irish Lord (*Torbay*), Lords and Captains, Tom Harry, Boatswain Gull.]

A passing visitor in spring and autumn, being most numerous at the latter season, when large flights appear off the south coast at intervals of about ten years (as in October and November 1879), and smaller numbers are seen in the Bristol Channel. This species is the least rare of all the Skuas, and is generally to be met with in *Torbay* in October, and

sometimes in winter, but it is not so numerous on the north coast of the county (M. A. M., Zool. 1859, p. 6331; A. von H., Zool. 1874, p. 3907). The specimens obtained are usually in the first and second year's plumage; adults, however, are not rarely met with. There is one which was taken with a hook and line in the Torquay Museum, and others have been obtained on Torbay, Plymouth Sound, &c., and also in North Devon.

Although the nesting-stations of this fine Skua are more remote from England than those of the other three species, it is (somewhat strangely) by far the most common and the most numerous of all the Skuas which visit our Devonshire coasts, some being seen off the south of the county every autumn, and in some years, when autumn gales have been severe and prevalent, great flocks appear in Torbay and Plymouth Sound and off the Cornish coast. We have ourselves encountered great numbers of the Pomatorhine Skua in October upon Torbay, where they were flying about like large Hawks in chase of the smaller Gulls, and robbing them of their fish; and one morning without any difficulty we secured fine examples in all conditions of plumage, among them some very fine white-chested adults with the central elongated tail-feathers (which in this species are not acuminate, but increase in width and are rounded at the end) perfectly developed. When shooting these birds we were struck by the way in which they succumbed to a very slight wound. As our old boatman has often said to us, "It is of no use to fire at a Gull until you can see its eye," meaning that the feathers are so closely set that they are sure to turn the shot unless the bird is within comparatively easy range; and this we have found from long experience to be true enough, yet it was different with the Skuas. We were shooting them with a little 18-bore muzzle-loader, and dropped them dead upon the water at long distances, and judged them to be but loose feathered birds, in consequence, in comparison with the other Gulls which were the objects of their persecution. Mr. Gatecombe has recorded numerous notes upon the Pomatorhine Skuas which came into his hands at Plymouth. In the 'Zoologist' for 1883, p. 421, he relates that in the shop of a bird-stuffer at Stonehouse he saw a specimen of this Skua, "a young bird of last year in very interesting plumage," which had been shot near the Manacles, off the coast of Cornwall, on the strange date of June 15th in that year; and we ourselves saw this bird in the flesh at Plymouth. In October 1881, a Pomatorhine Skua was obtained at Plymouth which had "two odd-coloured legs, one being wholly black, the other partly light blue and partly black, similar to that of the so-called Black-toed Gull. It is somewhat remarkable that the stomach of this bird, like that of a Honey-Buzzard [recently examined], contained nothing but feathers; I think it probable, however, that these feathers might have been accidentally swallowed by the bird when constantly picking itself during the moult."

An immature Pomatorhine Skua occurred at Plymouth, December 27th, 1852, and others in March and April 1855 (B. MS. Notes). A young bird was killed in 1871; there were great flights in the English Channel off the south coast (Salcombe and Kingsbridge) in November 1879. Three were secured at Plymouth, November 10th,

1879; one March 17th, 1880; and one in 'change,' October 1881 (J. G., Zool. 1872, p. 2940; 1880, pp. 20, 21, 48, 249; 1882, p. 65).

Several were seen and two were shot in September 1885, on the Kingsbridge estuary (R. P. N., MS. Notes).

Many in Torbay, October 1858; some there October 7th, 1869; two October 12th, 1869; two in first and two in second year's plumage, October 26th, 1871; some January 1874 (M. A. M., Zool. 1859, p. 6331; 1869, pp. 1917, 1983; 1872, pp. 2946, 2995; 1874, p. 3907). Flights visited the bay in November 1879 and November 1890 (W. E.).

An immature bird was killed on the Exe estuary in the winter of 1848-9 (W. R. S., Zool. 1849, p. 2385). One at Exmouth, October 1870; and one on the Exe estuary in November 1882.

We have seen a Pomatorhine Skua in the chocolate-brown immature plumage which was shot on a field in the parish of Sandford, near Crediton. In North Devon specimens of this Skua have been obtained at various times, but it is only when it is a great Pomatorhine Skua season on the southern waters of the county that a few appear on the Barnstaple and Bideford rivers, and are also noted far up the Bristol Channel. We possess a very fine pair of adults, with perfect tails and broad black bands across the chest, and fine golden hackles on the neck, which were shot at Instow in October 1879 (Zool. 1880, pp. 20, 21). The Rev. Marcus Rickards shot two on the Northam Burrows, on October 7th, 1874, one an adult, and the other in immature plumage, and has informed us that the former was most conspicuous when first observed, swimming very high in the water, and when put up flying restlessly about until it pitched upon the sand, where he stalked it from behind some sand-hills, and shot it as it rose. The immature bird was observed later the same day feeding upon a dead sheep upon the Burrows*. It was fired at, and flew off badly wounded, settling upon the water about half a mile from the shore, but was picked up dead upon the mud-flat near Appledore the following morning in very good condition (Zool. 1874, p. 4240; 1875, p. 4300). In the Westward Ho! College Museum is a specimen of the Pomatorhine Skua, shot at Instow, which is in the immature reddish-brown plumage, and was at first believed to be an example of the Common Skua.

Mr. W. Else, the Curator of the Torquay Museum, kindly showed us a large series of specimens shot in Torbay in November 1890. They varied greatly in plumage, some having much white on the head, and others being very dark in colour. One had the shoulders mottled with white feathers.

Mr. E. H. Rodd considered the Pomatorhine Skua a somewhat rare and irregular visitor to the Cornish coast, but mentions several examples, and we have seen one in the Museum at Truro. However, large flocks were seen off Looe, and recorded by Mr. Clogg of that place, in October 1879. On the North Somerset coast this species has been obtained at Minehead,

* In his note to the 'Zoologist' at the time, Mr. Rickards adds: "I observed with great interest the savage way in which it proceeded with its meal, running at the body, and tearing out the entrails with even greater energy and avidity than is usually displayed by the Crows, which make such short work with the carcasses of the many hapless sheep that are worried to death by dogs upon the Burrows."

on Steart Island, also at Combwitch, on the Bridgwater river, where it was called a "Mullin Hawk," and one, recorded by ourselves, in immature plumage, was shot at North Curry some distance inland, and specimens have also occurred at Weston-super-Mare. All these were the produce of the month of October, 1879, when a large number of Pomatorhine Skuas appeared off the S.W. counties (Zool. 1880, pp. 19, 20). In the same year and at the same period, Mr. Mansel-Pleydell states that a flock visited Poole Harbour, but before that time this Skua had only been a rare occasional visitor to the Dorset coast in spring and autumn.

Genuine eggs of the Pomatorhine Skua are very rare in collections. The bird is said to nest on some of the Lapland fells, also in Greenland, and on the *tundras* of Northern Russia (Yarrell's B. Birds, ed. 4, vol. iii. p. 670).

The range of this bird is very remarkable, and Mr. W. Theobald, late Deputy Supt. Geol. Survey of India, kindly informed us that a specimen was killed a few miles from Moulmein in 1859.

Richardson's Skua. *Stercorarius crepidatus* (Gmel.).

[Robber Bird, Irish Lord, Tom Harry, *Dev.*; Arctic Skua, Boat-swain Gull.]

A passing visitor, sometimes not uncommon in autumn, but rarely seen in spring, as it generally keeps well out to sea on its migrations. The young or immature birds are most frequently met with in Torbay in October, and there are specimens of both the adult and young from that beautiful bay in the Torquay Museum. This Skua also occurs occasionally at Plymouth; on the Exe estuary; and on the North Devon coast, where it occurred as early as August in 1872. It is sometimes driven inland in an exhausted state by stormy weather.

Richardson's Skua, one of the species conspicuous in the adults for the possession of two elongated acuminate central tail-feathers, is quite a common bird in the summer-time off the north-west coast of Scotland, where we have frequently seen it, not only closely following the steamers for anything which might be thrown overboard, but hovering close over the heads of the passengers on deck, as if it would dart down and take their buns and sandwiches out of their hands. But although so numerous off the Scottish coast, and nesting commonly on the islands of the Hebrides and on the Orkneys, Richardson's Skua is far from a frequent visitor to the S.W. counties, and is not seen so often, or in such numbers, as the preceding species. Still, we have encountered many of these birds on Torbay in October, where we obtained examples of the white-breasted and also of the black forms, and we have known specimens in all stages of plumage to occur occasionally in the autumn on the Barnstaple river, whence Mr. Cecil Smith received one which was shot in October, and from the description of it furnished by him to Mr. Dresser ('Birds of Europe,' vol. viii. p. 473) it was evidently a bird in its second year. A fine adult

in full plumage was brought to us *in June* at Instow, which had swallowed a baited hook on a spiller line upon the sands. The Rev. Marcus Rickards saw an immature specimen in dark plumage in the bird-stuffer's shop at Barnstaple at the end of August, 1872, which had just been shot at Instow (Zool. 1874, p. 4241). An extremely black example of this Skua, a remarkably handsome and singular-looking bird, was obtained at Budleigh Salterton on November 12th, 1891. A similar bird is stated to have been shot at the same place some years since.

Two examples of Richardson's Skua were obtained after a severe south-west gale at Plymouth, in September 1828; one was shot in a field, and another caught in Cattewater Harbour, Plymouth, in an exhausted state by a water-spaniel, October 9th, 1828. Two others were obtained by Drew at the same time, and another at Mothecombe by Mr. Jenkins, gamekeeper to R. Julian, Esq. (E. M., Trans. Plym. Inst. 1830; Mag. Nat. Hist. 1837). One on September 18th, 1857, at Plymouth (B., MS. Notes), and an adult was seen by Mr. Gatcombe flying past the Devil's Point, Stonehouse, November 25th, 1872 (Zool. 1873, p. 3399).

Specimens occurred at Kingsbridge between 1840 and 1847. A male was picked up dead in a field near Kingsbridge, May 29th, 1860 (H. N., Zool. 1847, p. 1694; 1860, p. 7106; and MS. Notes); and one was shot on the estuary, November 1874 (E. A. S. E.).

Three or four were seen driving Gulls in Torbay in October 1844, after a gale of wind (F. W. L. R., MS. iv. p. 132). Two were shot in Torbay, October 1858 (M. A. M., Zool. 1859, p. 6331); one in October 1876 (G. F. M., Zool. 1876, p. 5161); and several adults in November 1890 (W. E.).

An immature male was shot on the Exe estuary, September 30th, 1868 (M. S. C. R., Zool. 1869, p. 1518), and one September 21st, 1870. An adult was shot at Christow, ten miles from the sea, October 10th, 1873, and was seen by us in the flesh.

Both Mr. Rodd and Mr. Mansel-Pleydell speak of Richardson's Skua as only rarely seen on the coasts of their respective counties. Mr. Rodd adds that he knew of no Cornish example in the adult plumage. Although describing it as more common than the Pomatorhine Skua, Mr. Mansel-Pleydell could only enumerate four examples. Nor is this Skua other than a very rare visitor to the coast of North Somerset. We know of one in immature plumage which was shot on the sands at Weston-super-Mare, and Mr. Rickards saw a fine specimen of an adult which had been obtained in December 1873 on the shore near Clevedon.

Mr. Howard Saunders, whose full account of the Laridæ in fourth edition of Yarrell's 'B. Birds' we have carefully consulted, states that this species, like the other Skuas, is more numerous on the eastern side of the kingdom in its passage south in the autumn. Richardson's Skua makes no nest, merely depositing its eggs in a cup on the mossy ground, which it hollows out with its breast. It is a very widely diffused species, being met with off the Cape of Good Hope and off the coast of India. Mr. Howard Saunders states that the white-breasted and the black forms are to be found on the same nesting-stations, and that they interbreed with one another.

Buffon's Skua. *Stercorarius parasiticus* (Linn.).

[Long-tailed Skua.]

A casual visitor, of rare occurrence. Specimens have been obtained in summer, autumn, and winter.

Until the autumn of 1891 we could only have stated that this long-tailed species was extremely rare on the S.W. coasts, and that very few Devonshire examples were on record. But the severe October gales of that year drove a large flock, chiefly of adults and of others closely approaching the adult plumage, into the English and Bristol Channels, and if we start from the neighbourhood of Christchurch in Hants, and follow the coast-line around Devon and Cornwall until we nearly reach the far east of Somerset on the Bristol Channel, at least fifty specimens were reported. Before this great visitation the few examples of this Skua which had been obtained in Devonshire were all young birds in their first year's plumage; one of them, secured by Mr. Cecil Smith at Exmouth, is now in our possession. In October 1891, two other examples in a very interesting state of plumage were shot at Exmouth. One of these which was sent to us has the dark feathers of the mantle edged with semicircular patches of white, there are numerous white spots upon the head and neck, and the white breast and underparts are barred with ash-grey. The elongated tail-feathers are just sprouting, and are about an inch in length. This bird is very interesting from its *mealy* condition of plumage. Another sent to us from Barnstaple has the tail the full length of thirteen inches, the two central feathers projecting eight inches beyond the others, but shows that the full adult dress has not yet been attained in the grey bars which still appear upon the throat and breast, and in the absence of the yellow hair-like feathers from the cheeks. We are informed that the shore-shooters at Barnstaple termed these Skuas "Fork-tailed Petrels." The Rev. Marcus Rickards has written to tell us that some were seen as high up the Bristol Channel as at Clevedon, where one was shot, and described in a local paper as a "Buffon's Skaw" (*sic*).

Mr. E. A. S. Elliot wrote to us that on October 14th, 1891, a flock of Skuas came into Bigbury Bay near Thurlestone, and that eleven of them were killed. Mr. Elliot himself shot another on the following day near the same place, as it rose from the pool formed at the exit of Milton Ley. All these birds proved to be Buffon's Skuas; and one that Mr. Elliot was good enough to send to us to examine was very like the Exmouth specimen, but had the central tail-feathers better developed, and had more black on the head. There were a few white spots on the back, and a good deal of white on the underparts. Mr. Elliot tells us that the other birds varied very much; one was in fairly good adult plumage, and one was very dark, probably a bird of the year. Most of them were dark grey with lighter edgings to the feathers.

A Buffon's Skua was killed at the Mewstone in October 1833 (E. M., Mag. Nat. Hist. 1837, p. 360). A fine specimen in full summer dress was shot on Kingsbridge estuary by Mr. Beechey on June 6th, 1860, and it was in company with another

(H. N., MS. Notes, and Zool. 1860, p. 7106). An immature specimen was shot on Torbay in the winter of 1863; and Mr. Gatecombe records an adult killed near Plymouth (E. P., Trans. Devon. Assoc. viii. p. 299). There is an immature bird, believed to belong to this species by Mr. Gatecombe, and said to have been shot on the estuary of the Exe, in the collection formed by the late Mr. Byne, which came into the possession of the late Mr. Marsh-Dunn of Teignmouth. Another immature specimen from Exmouth was in Mr. Cecil Smith's collection, and on 18th October, 1891, two were shot at that place, a dozen at Kingsbridge, and one at Ilfracombe.

Mr. Rodd states that Buffon's Skua was a very rare bird in Cornwall and that the only two instances he knew of were adults—one found inland in the parish of St. Buryan, in September 1861; the other sent to Mr. Vingoe at Penzance from the neighbourhood of Falmouth in the first week of October 1874, which was said to have been shot at a distance of ten miles from the coast. To these we can add a third, also an adult, which we saw in the Truro Museum, which had been shot at Polperro.

In Somerset we only know of two examples previous to the irruption of this species in the autumn of 1891—one an immature bird shot by Mr. C. Haddon, of Taunton, on the coast at Stolford, in September 1873; and the other an adult in perfect plumage, which was shot on the estate of Mr. W. Ayshford Sanford, at Nynhead, as it rose off a dead Wood-Pigeon which it was eating. This was towards the end of October, 1862. Mr. Mansel-Pleydell knew of no Dorsetshire examples, but his county partook in the visitation of this species we have so often referred to above.

Buffon's Skua nests upon the ground on the fells of Sweden and Lapland and is said to feed upon the lemmings, upon crowberries, large beetles, &c. Formerly a few pairs nested in Caithness in Scotland, but were all destroyed by a gamekeeper. This Skua is also said to have nested occasionally on Holy Island and on the island of Hoy.

Mr. Howard Saunders says that an unfailing distinction at all ages is to be found in the colour of the shafts of the primaries: in the Long-tailed or Buffon's Skua only the two outer ones on each side are white and the others are dusky; in the Aretie or Richardson's Skua all the shafts are white (Yarrell's B. Birds, 4th ed. vol. iii. p. 684).

Order TUBINARES.

Family PROCELLARIIDÆ.

THE PETRELS.

The Petrels are denizens of the wide ocean, where they are ever flitting restlessly about, roosting upon its surface, never approaching land except at the nesting-

season, when they visit the rocky islets, where they breed, and where they are rarely seen, as they keep in their holes throughout the day, only coming forth to feed at dusk. Although in our arrangement immediately following the Gulls they have little or no connection with those birds, as they differ from them in many respects. First, there is the peculiar position of the nostrils, which, in the Petrels, are placed in bony tubes attached to the ridge of the upper mandible; another point of dissimilarity is furnished by their eggs, the Petrels laying but one white egg, sometimes having a zone at one end of small red or violet spots; they differ also in their young being helpless when hatched, and when the adult birds rest upon the rocks they recline upon the full length of the tarsus instead of standing upright upon their feet, but we have occasionally noticed Gulls doing the same. In their plumage the true Petrels are either black or greyish black, have a white patch above their tails, very slender legs, with webbed feet, and as they fly low above the surface of the sea, rising over the crests of the waves and dropping again into the succeeding trough, they may be seen every now and then to hover, and as it were pat the water with their feet as they are on the look-out for the small marine creatures or the greasy substances thrown overboard from some vessel in whose wake they may be following. Another characteristic of the whole family of Petrels is the quantity of oil they produce, which is contained in their stomachs and used both for the purpose of feeding their young and, in some species, for their own defence, as they immediately vomit it when handled. There are two species of small Petrels, the little Storm-Petrel and the Fork-tailed or Leach's Petrel, which nest on islands off the Western and North-western coasts of the United Kingdom; and another of them, Wilson's Petrel, whose home is on the Southern

Oceans, has occasionally, but rather rarely, occurred as a straggler to our shores. Besides these smaller species we have the Fulmar, a fine bird with gull-like plumage, whose breeding-place in the British Islands is on St. Kilda; and the various Shearwaters (*Puffinus*), Petrel-like birds, of which the Manx Shearwater is indigenous and the commonest representative of the family on our Devonshire waters. Occasionally in the autumn the southern coasts of the county are visited by two larger species, the Greater and the Sooty Shearwaters, the former sometimes appearing in great flocks off Plymouth, and then not being seen again for years. In spite of these birds being sometimes very numerous a little distance from land they are but rarely obtained upon the coast, except after violent gales, when examples of our native species, and, at rarer intervals, a chance specimen of some Petrel of the southern hemisphere, are blown inland. We possess examples of the Storm- and Leach's Petrels, as well as of the Fulmar, all obtained after rough weather in the streets of Barnstaple, and the two former have also been found in the streets of the city of Exeter. Oceanic birds may be expected to occur from all parts of the world upon the English shores, when driven out of their ordinary course by storms; hence the appearance upon the list of British Birds of such southern species as *Wilson's Petrel*, *Dusky Shearwater*, *Cape Pigeon*, and *Capped* and *Bulwer's Petrels*, all blown northwards from their usual haunts, and all of them unconnected with the Ornis of our latitudes. Of these, *Wilson's Petrel* is the only one which has been detected on the Devonshire coasts. The Rev. Charles Swainson informs us that "the Petrel is so named from the French *pétrel*, a diminutive of *Pétre*, *i. e.* Peter; and the allusion is to the Apostle walking on the Sea of Galilee. Whilst skimming along the waves its legs hang down, and





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the feet seem to touch the water, presenting the appearance of walking on the surface of the water." ('Provincial Names of British Birds,' p. 211.)

Storm-Petrel. *Procellaria pelagica*, Linn.

[Mother Cary's Chicken, perhaps derived from *Mater cara*.]

Resident, but generally keeps well out at sea. Breeds occasionally on Lundy Island (Trans. Devon. Assoc. viii. p. 308). It is rarely met with near the shore except after violent gales, especially in autumn and winter, when specimens are not unfrequently picked up dead, or in an exhausted condition, even far inland, having been driven ashore by the force of the wind.

This, the smallest of the Petrels, is by far the commoner of our two British species of *Procellaria*, and nests along the western side of the kingdom from the Scilly Islands to the Hebrides. A few, perhaps, breed on Lundy; and some certainly do on Skomer, an island on the northern side of the entrance to the Bristol Channel. The Storm-Petrel is a late breeder, not depositing its single egg until the second or third week in June, so that when we visited an old wall on the top of a cliff on Skomer at the end of May we were too early to find the birds nesting in its holes and chinks, although we detected about the masonry the unmistakable Petrel scent which clings to eggs of the true Petrels (*Procellaria*) and also to those of the Fulmar for many years after they have been blown, as it also does to their skins. Like all the Petrels, this species is so full of oil that it is said the inhabitants of the Færoe Islands, by merely passing a wick through the bodies of the birds and lighting the end, supply themselves with light. Owing to its nocturnal habits the Storm-Petrel is very seldom seen, and may nest at places on the cliffs of the mainland where its presence is not suspected.

Storm-Petrels are occasionally killed by flying against the Start Lighthouse (R. P. N., MS. Notes). Dr. E. Moore says that "some are frequently caught in winter in Plymouth Harbour by flying against the lanterns of the Breakwater Light Vessel;" and "that great numbers are killed every winter by flying against the lantern of the Eddystone Light. Five were caught alive June 15th, 1830, in Plymouth Sound" (Trans. Plym. Inst. 1830, p. 336; Mag. Nat. Hist. 1837, p. 360). From the Migration Reports of the British Association it would also appear that this species is commonly captured at the Eddystone Lighthouse on November nights. "Twenty-one Storm-Petrels were captured between 6 and 12 p.m. at the Eddystone on November 21st, 1886. They came to the lights in twos and threes, striking the lantern very gently" (Mr. Ainger).

On August 16th, 1876, several were captured in an exhausted state in Plymouth Sound. The weather was fine with a nice breeze, but the day after it blew a gale from the east accompanied by a tremendous thunderstorm. A very young specimen was caught by a cat in the centre of Plymouth in October 1883. One was killed by a Herring-Gull in the Great Western Docks, Plymouth, June 22nd, 1883. After a heavy gale in October 1886 some Storm-Petrels were driven inland near Plymouth, and were mostly found dead, but one taken alive lived in a cage for nearly a fortnight,

being fed on minute scraps of fat. It drank freely of water when offered (J. G., Zool. 1876, p. 5110; 1883, p. 421; 1884, p. 54; 1887, p. 377).

Storm-Petrels are sometimes picked up dead, after severe storms, near Kingsbridge (E. A. S. E., MS. Notes).

This Petrel has occurred several times in Torbay, and specimens captured there are in the Torquay Museum. Four were obtained in November 1891 (W. E.).

A Storm-Petrel in the A. M. M. was driven into the windows of a shop in the High Street, Exeter, in 1824 (R. S.); and another was picked up alive on the road at Upton Pynes, near Exeter, after the great storm of October 15th, 1877. One occurred at Topsham, October 16th, 1886 (W. E. P., 'Birds of Devonshire,' p. 187), and one at Exmouth, October 18th, 1891.

One was obtained at Seaton, November 28th, 1881 ('Field' for December 30, 1881).

Two were picked up dead after storms in November 1859 near Barnstaple.

This minute Petrel is hardly larger than a Common Swallow, and Col. Montagu found that it only weighed an ounce. A friend of the Colonel's received eggs taken in June from nests "on the rocky coast of the north of Cornwall," and in the summer of 1866 Mr. Gill of Falmouth found a nest on the Gull Rock in the fine harbour, containing *two* (?) eggs. "So closely did the female bird sit that she allowed herself to be caught on the eggs, and the male was also secured." Mr. E. H. Rodd also states that on fine summer evenings at sunset small flocks of Storm-Petrels may be seen "five or six miles out in Mount's Bay, flying and hawking about in pursuit of small insects, in the manner of the Swallow tribe, sometimes dipping, but seldom alighting on the sea, skimming for a few seconds with open wings, and mounting again in the air. Whilst thus engaged they appear to be quite regardless of danger, and of the presence of man." In August and September little flocks of a dozen or twenty may often be seen to the westward of Portland (Mansel-Pleydell, 'Birds of Dorset,' p. 114).

Leach's Petrel. *Procellaria leucorrhœa*, Vieillot.

[Fork-tailed Petrel.]

A casual visitor during the autumn and winter months, when individuals are driven inland by violent gales. It has occurred all along the southern coast of the county on numerous occasions, and several times on the north coast.

This Petrel is a rather larger bird than the preceding species, and may readily be known by its forked tail; its black plumage is browner on the underparts, and the wings possess a pale alar band. We have no nesting-station of Leach's Petrel in the South of England, but it breeds on some of the islands of the Outer Hebrides. It is no rarer in our S.W. Counties than the Storm-Petrel, and is frequently picked up on the coast, or some way inland, after heavy gales. Many were obtained in this manner after the severe storms of October 1891. We possess two very perfect specimens, one from the streets of Barnstaple, the other found dead upon the Braunton Burrows; and we ourselves one day met with another on the banks of the Taw, which was too much battered by the weather to make into a skin.

The first recorded example from this county was killed in 1823 (Shaw's 'Zoology'). In December 1831 two were caught alive in the streets of Plymouth, where another was obtained in November 1835. Bolitho had five and Drew two specimens (E. M., Mag. Nat. Hist. 1837, p. 360). One was picked up in an exhausted state at Millbay Pier, Plymouth, November 9th, 1852; and another, also in an exhausted condition, on the rocks in Plymouth Sound during a heavy gale December 27th, 1852 (J. G., 'Naturalist,' 1853, pp. 84, 228); one at Plymouth in January 1856; one taken alive in a court in Richmond Street, Plymouth, after a gale December 3rd, 1865, and another on the Tamar about the same time (J. B. R., Zool. 1866, p. 102; and MS. Notes). One November 30th, 1865 (B., MS. Notes). Two November and one December 1872 off Plymouth. A bird of the year was picked up dead near Cargreen on the Tamar, September 5th, 1883 (Zool. 1873, pp. 3400, 3443; 1884, p. 53; J. G., *in litt.*).

One was caught alive at Kingsbridge, near the estuary, November 17th, 1878. Mr. H. Nicholls has two specimens shot at Thurlestone (E. A. S. E., MS. Notes). One was picked up on the beach at Kingsbridge in October 1891, and thirty or forty Petrels were seen under the lee of an island off the coast during the S.W. gale of October 14th, 1891 (A. H. Palmer in 'Field' for October 24th, 1891). A Leach's Petrel was captured at 10 A.M. on November 22nd, 1886, resting inside one of the ventilators at the Start Light (Migration Report, 1886).

One occurred at Paignton November 26th, 1870 (J. H. G., Zool. 1871, p. 2443). One was found in the bottom of a boat in Torquay Harbour after the storm of November 11th, 1891, being the first ever obtained at that locality (W. E., *in litt.*). One was captured at Teignmouth in November 1865 (C. S.).

A specimen found dead in the marshes opposite Topsham in 1859 is in the A. M. M. A Fork-tailed Petrel was seen by ourselves flying over Southernhay, Exeter, during a gale from the S.W., November 26th, 1865; another occurred at Starcross, in the Exe estuary, in 1866. One was taken at Seaton in the winter of 1882-3.

The habits of Leach's Petrel are very similar to those of the Storm-Petrel, and it is a widely-distributed species, being found both on the eastern and western coasts of North America. Dr. Bullmore states that off the south of Cornwall Leach's Petrel is not at all uncommon in winter, and is quite as numerous as the Storm-Petrel. He writes in his 'Cornish Fauna':—"During the prevalence of one of the gales of last winter [*i. e.* 1866] a pair were observed at the mouth of Falmouth harbour, trying all they could to get up the river. In vain did they attempt to forge to windward, dipping from time to time in the trough of the sea, and as rapidly emerging from the hollow, just tipping the crest of the wave with their tiny feet. While thus occupied a violent gust drove them both on board a fishing smack that was working into the harbour. One struck against the mast, and fell dead in the boat. The other struck the vessel's side, and disappeared beneath the waves." Leach's Petrel has been also picked up dead in various places in Somerset, and has occurred not unfrequently on the Dorset coast as well as inland in that county.

Wilson's Petrel. *Oceanites oceanicus* (Kuhl).

An accidental visitor, of rare occurrence. One is said to have occurred at Sidmouth in December 1870. Besides this example there is also one in the collection of British Birds formed by the Rev. Alan Furneaux (received from Capt. Creyke, R.N.) in the Museum of the Plymouth

Institution, but we have not been able to obtain any information about it. Mr. Seaward, a bird stuffer in Exmouth, had a specimen which he states was brought to him in the flesh on November 13th, 1887, having been obtained at that place.

Two at least, if not three, examples of this Petrel, which comes intermediate in size between the Storm- and Leach's Petrels, have been obtained in the south of Devon, and another was picked up dead in a field near Polperro, in Cornwall, many years ago in the month of August. One of the Devonshire specimens, that from the beach at Exmouth, where it was shot November 13, 1887, is before us as we write, and we find that this species is to be easily distinguished from our two indigenous Petrels by its longer legs, by the webs of its feet having yellow patches, and by a slender white line across the wings. The bird is said to carry its long legs trailing behind and projecting beyond the tail, so as to appear like two elongated feathers. It is an inhabitant of the Atlantic, Indian, and Pacific Oceans. Flocks are stated to have been occasionally seen at the entrance of the English Channel, notably one close off the Land's End, by Mr. J. Gould, in May 1838. The only authenticated breeding-station of Wilson's Petrel yet known is one on Kerguelen Island, discovered by the Rev. A. E. Eaton, Naturalist to the Transit of Venus Expedition.

On our return voyage from the Cape of Good Hope, in October 1861, several specimens of this species were captured by means of a fine cotton line let out from the stern of the steamer. By careful management in pulling the thread tight, and then letting it fall slack, just as a Petrel passed under it across the wake of the vessel, the bird's wings became entangled, and it was easily hauled in. This mode of capturing Petrels can only be used in calm weather, as when there is any wind a fine line will not touch the water. No weight (excepting sometimes a cork), hook, nor bait is required. We have ourselves captured, and seen other persons capture, Cape Pigeons and Gulls in this way, only using a stronger line. It all depends upon the line becoming so tightly twisted by the motion of the vessel that it kinks when slacked and twists around anything it touches. The last Wilson's Petrel we saw was about eighty miles north of Madeira, in latitude $34^{\circ} 4' N.$, longitude $16^{\circ} 52' W.$ In some years this species comes further north, and enters both the English and St. George's Channels. (W. D'U.)

Manx Shearwater. *Puffinus anglorum* (Temm.).

[Mackerel Cock (Torbay), Cuckle or Cockle (Lundy Island).]

Partially resident, but most numerous in spring and autumn.

Owing to its breeding on Lundy, on the Scilly Islands, and on Skomer and Skokolm, islands off the S.W. coast of Pembrokeshire*, this bird is

* Caldy Island, off Tenby, has been erroneously added to the list of breeding-stations of the Manx Shearwater in the S.W. of England. We have ascertained that none nest there.

extremely numerous on the seas off the South-western Counties of England, although few people, perhaps, have seen it alive, because it very rarely indeed enters any of our estuaries, and would never do so were it not occasionally driven in by violent gales, after which it is sometimes picked up far inland. We have seen great numbers of Manx Shearwaters in Torbay in October, skimming in flocks over the surface of the water, and every now and then cutting through the crests of the waves, a habit from whence they derive their English name. We secured several examples, all of them having ash-grey underparts, which we judged to signify the first year's plumage. Two adults, with pure white breasts, were obtained on the Barnstaple river after the very rough weather in October 1891. Anyone who in the summer visited a breeding-station of the Manx Shearwater would have little suspicion of the vast bird-population concealed beneath his feet, for in the daytime all the birds are in their burrows, and do not venture out until the night is well advanced. One beautiful summer's night when we were on Skomer Island for the express purpose of being introduced to the myriads of Shearwaters resorting there to breed, we found no birds stirring at 10 P.M., so returned to our friend's hospitable house for another game of whist, and going out again a little before 11 o'clock discovered that the hosts of Shearwaters were only then beginning to awake. Presently the air all around us was filled with the strange wailing of the birds; they were flitting on either side and crossing us about the height of our head, coming close to our face as they passed like ghosts; we could see them issuing from their holes at our feet, and flapping a little distance upon the ground before they could rise on wing, a circumstance which was taken advantage of by an old dog from the farm which had joined us, and which caught and brought the Shearwaters to our hand until we called out "hold, enough!" Each bird we took immediately vomited a quantity of oil, when, as we were in no need of specimens, we tossed it into the air and let it go. At the first streak of dawn the noise of the birds gradually ceased, and when the sun was up silence again reigned, and all had returned to their burrows. In the summer-time when we have been on the water small parties of Shearwaters have sometimes crossed our boat flying rapidly and silently onward, so that there are a few abroad in the daytime. The birds nest in their burrows, which are either stolen from the rabbits, or excavated by themselves in the light sandy soil, and deposit a single white egg, about the size of a hen's egg.

"Often met with by our fishermen in the vicinity of the Eddystone. In October 1832 seven were obtained in the Sound by Mr. Drew. Two were brought alive to Mr. Magrath in the summer of 1833, and two others are in the collection of Bartlett, a bookseller in Plymouth" (Mag. Nat. Hist. 1837, p. 360). Two specimens at Plymouth, April 20th, 1855 (B., MS. Notes). Some off the Eddystone in August 1871; hundreds in the Channel off Plymouth, March 1877, and at the end of April 1878, and one about August 22nd, 1878.

From the late Mr. Gatcombe's notes, the Manx Shearwater appears to be sometimes very numerous in the Channel, some distance out at sea, off the south coast in March and April (Zool. 1877, p. 279; 1878, pp. 418, 432; and MS. Notes), and a few are seen in August. Mr. Cecil Smith says it is by no means uncommon on both the north and

south coasts of the county as an autumnal straggler ('Field' for October 21st, 1882). The late Mr. Ross observed that it is often seen in Torbay after herrings and sprats, and according to our own observations it follows mackerel-fry in October, and is well known to the boatmen as the "Mackerel Cock," and is sometimes very numerous (M. A. M., Zool. 1869, p. 6330). But according to Baron A. von Hügel (Zool. 1874, p. 3906), it seldom enters Torbay, although very large flocks are said to be occasionally seen some distance out at sea, and a few are obtained on the Bay in winter; whence specimens in the Torquay Museum and in the A. M. M. were procured. One was obtained in Torbay, November 3rd, 1873, and several were shot there in November 1890 (W. E.). One was killed on Kingsbridge estuary in 1874 (R. P. N.). The Manx Shearwater is very numerous, and breeds on Lundy Island, where it is well known under the name of "Cuckle" or "Cockle." Mr. Wright, the tenant of the island, informs us that they may be heard wailing on any fine night during the summer.

The Manx Shearwater is also numerous off the Cornish coast in the autumn, and flocks are sometimes seen in Poole Harbour in that season, but in Somerset it appears to be unknown.

Sooty Shearwater, *Puffinus griseus* (Gmelin).

A very rare accidental visitor.

Mr. J. H. Gurney has seen a specimen of this species in Mr. Gould's collection labelled "Plymouth," which was sent to him by Mr. Gatcombe, and a second seems to have occurred at the same locality (H. Saunders, Yarrell's B. Birds, 4th ed. iv. p. 18).

This is a larger species than the Manx Shearwater, and is of a uniform dark plumage. It was for some time considered to be either a dark form or the immature state of the Greater Shearwater. It is an oceanic bird with an enormous range, being met with from Greenland in the far north to New Zealand in the south. Two examples appear to have been obtained on the South Devon coast, and one in Mount's Bay, Cornwall, the last as long ago as 1838, and another in Poole Harbour, in Dorsetshire, in June 1887, which seems to be the most recent occurrence recorded from the south-western coasts. Mr. Gatcombe stated that it was occasionally seen off Plymouth. According to Mr. Dresser ('Birds of Europe,' vol. viii. p. 524), there is an example of the Sooty Shearwater in the Frome Literary Institution, which formerly belonged to the collection of Mr. Horner of Mells Park, but this is a mistake; the only Shearwater among the birds now there is a small species, labelled "Dusky Shearwater, *Puffinus obscurus*," which after examining and comparing with a Manx Shearwater we took there for the purpose we ascertained to be without any doubt only an ordinary and badly mounted specimen of that common bird. But little is known as yet of the changes of plumage in this species. It is abundant off the coasts of Newfoundland and Labrador, and in the Bay of Fundy goes by the name of the "Black Hagdon,"—"Hagdon" being a name given to the Greater Shearwater. There is a great nesting-place on the Chatham Islands off the east of New Zealand, and the Maoris are said to be very fond of the young birds, which are enormously fat. The actions of the Sooty Shearwaters at the nesting-season are those of the Manx Shearwater on an exaggerated scale; the noise they make at

nights is described as a dreadful mixture of the squalling of children and the caterwaulings of thousands of cats; they lay a single egg in their burrows, and are very fierce when their nests are interfered with.

The figure given by Mr. Dresser is taken from an example obtained in Plymouth Sound. In Lord Lilford's 'Coloured Figures of the Birds of the British Islands' is a beautiful plate giving two Sooty Shearwaters taken from specimens from the Yorkshire coast.

Greater Shearwater. *Puffinus major*, Faber.

[Hackbolt.]

An irregular winter visitor from the Atlantic to the south coast of Devon, sometimes in large numbers. It generally keeps far out at sea, but early in November 1874 numbers visited the south coast after an almost total disappearance for many years (J. G., Zool. 1874, p. 4262; 1875, p. 4300). This Shearwater was first distinguished from *P. anglorum* by Dr. E. Moore in his "Cat. Birds of Devon" (Mag. Nat. Hist. 1837).

This is another large species of Shearwater belonging to the Atlantic Ocean, commonly seen every autumn off the Scilly Isles, and occasionally met with in large flocks off the Cornish coast, at Mount's Bay, off Looe and Polperro, and also in Plymouth Sound, where Mr. Gatecombe obtained several examples. It has also been seen further to the east in the English Channel off the Dorset coast, having occurred in Poole Harbour, Swanage Bay, &c. We have in our collection a fine adult specimen which was caught at Penzance in January 1872, and was forwarded to us with a note that at that time there was only one other specimen existing in that town, which had been shot at the Land's End. We have never heard of this Shearwater on the North Devon coast, but as it never comes into the estuaries it has probably been undetected, for it must occasionally enter the mouth of the Bristol Channel and occur off Lundy and Clovelly. Mr. Joseph Dunn, who some years ago was well known as a dealer in birds' eggs and skins at Stromness, in Orkney, once wrote to inform us that, one day when he was out in his boat fishing in the summer-time, and had no gun with him, he was suddenly surrounded by a great flock of these large Shearwaters, which kept near him for some time. In its flight and actions this species closely resembles the Manx Shearwater, and although it is widely distributed, nothing certain is as yet known respecting its breeding-stations, although eggs, purporting to belong to it, have been brought from South Greenland. Our specimen, which we have before us, has pure white underparts, a lightish brown cap upon the head, the back brown, with paler margins to some of the feathers, and the tail and wings dark brown.

There is a specimen of the Greater Shearwater in the Torquay Museum, which was taken with a hook and line in Torbay in 1860 (Zool. 1874, p. 3909); and another was taken in the same way outside Torbay in 1865 (F. Pershouse, Jun., Trans. Devon. Assoc. viii. p. 298). One occurred off Berry Head in February 1869 (A. von H., Zool. 1869, p. 1720).

Mr. Gatcombe had one sent him from Seaton in 1874. Another was taken alive in Plymouth Sound in November 1852 (J. G., 'Naturalist,' 1853, p. 84); and a pair in an exhausted state were taken alive by two trawl boys December 11th, 1852 (J. B., *op. cit.* p. 204); one of these was figured in Dresser's 'Birds of Europe.' In 1867 an adult female was captured in an exhausted condition on a trawler; three were taken November 6th, 1874; and an adult bird was killed off Plymouth at the end of July 1876 (J. G., Zool. 1868, p. 1295; 1874, p. 4262; 1876, p. 5127). There is a specimen from Plymouth in the A. M. M., and another was in Mr. Cecil Smith's collection.

[*Observations.*—Writing of the Dusky Shearwater (*Puffinus obscurus*) in Dorsetshire, Mr. Mansel-Pleydell calls it "A rare spring visitant, I have only heard of one having been procured in this county. This, as I am informed by Mr. E. Hart, was caught alive in Poole Harbour, June 5th, 1877." But, subsequently, in the 'Zoologist' for 1888, p. 143, this statement is corrected, the bird proving to be a Sooty Shearwater (*Puffinus griseus*). There appear to have been two undoubted specimens of the Dusky Shearwater obtained in the United Kingdom—one in Valentia Harbour, May 11th, 1853, which was exhibited at a Meeting of the Linnean Society, June 7th, 1853, and the other near Bungay in Suffolk about 10th April, 1858, which was exhibited by Mr. Osbert Salvin at a Meeting of the Zoological Society, May 16th, 1882. (Yarrell's 'British Birds,' ed. 4, vol. iv. pp. 28, 30.) This species nests on the Desertas, some small islands near Madeira, and belongs to the Southern Oceans. It is something like a small Manx Shearwater, but the upper parts are much blacker, the bill more slender, and it is without the dark band behind the thighs which occurs in the Manx Shearwater.]

Fulmar. *Fulmarus glacialis* (Linn.).

[Mollymew or Mollymauk.]

A casual visitor, of rare occurrence, during the winter months.

An inhabitant of northern seas, this bird very seldom wanders to the south. In the breeding-season it resorts in incredible numbers to St. Kilda, and confers immense benefits on the inhabitants of that sterile island. They derive their supply of oil for their winter lamps from it; its eggs and young afford highly relished food, and countless numbers of the birds are salted down for winter consumption, while its feathers give them bedding, &c.,—what the Reindeer is to the Lapps, the Fulmar Petrel is to these poor people. It lays a single white egg of considerable size, and from a large basketful fresh from St. Kilda we once picked out one which was *red* all over. We know of only a single instance of the occurrence of the Fulmar in North Devon, one in the bluish-grey plumage of the first year which was shot February 2nd, 1859, as it was flying over the fish market at Barnstaple. We examined this bird in the flesh, and found upon its neck a large osseous tumour, bare of feathers, and weighing nearly three ounces; it was round, and about the size of a Mandarin orange, and appeared to us to have been caused by some injury, possibly from a shot-wound, to the cervical vertebræ, from which it was probably

exfoliated. We made a section through it, and then forwarded it to Mr. Yarrell, who was much interested with it. In spite of having to carry about such a burden, the bird was fat and in excellent condition. (Zool. 1859, p. 6448.)

A Fulmar occurred near Plymouth, November 1844 (W. S. H., Zool. 1845, p. 879). There is a nearly adult specimen in the A. M. M. which was killed with an oar on the Exe just above Topsham; Mr. Ross records it in his MS. 'British Laridæ,' but gives no date. A calcareous concretion was taken out of the vent and was preserved. One occurred at Bigbury Bay (J. B. R., Trans. Plym. Inst. 1862-3, p. 82). Another was picked up alive near Dawlish, November 30th, 1866 (C. S., Zool. 1867, p. 562), and another is recorded by Mr. G. P. R. Pulman in his 'Book of the Axe' (2nd ed. p. 27). A female was captured alive at Plymouth, October 24th, 1867 (J. H. G.).

Four or five have been obtained on the Cornish coast, most of them picked up either dead or in an exhausted state; we saw an example in the Museum at Truro. There appears to be no record of this species from Dorsetshire; and only two from the county of Somerset—one reported by ourselves in the 'Zoologist' (1869, p. 1644), an adult which was shot at Weston-super-Mare in the winter of 1868, among the numerous Gulls which came into the bay after the shoals of sprats; and the other, according to Mr. Cecil Smith ('Zoologist,' 1884, p. 145), was obtained near Taunton on 29th December, 1883. We have seen the Fulmar alive off the N.W. coasts of Scotland and Ireland, and off Newfoundland. It resembles a Herring-Gull in its plumage, but may be readily distinguished by its skimming flight, and when it approaches close its singular-shaped beak, with which it can give a very vicious bite, makes it at once known. It is fond of attending on the fishing-boats, coming fearlessly near to seize any rejected fish which may be thrown overboard, and in particular delights in blubber, and is a constant companion in the Polar regions of the ships which pursue the whale and seal.

Order PYGOPODES.

Family COLYMBIDÆ.

THE DIVERS.

In this family there is but one genus, containing only three well-determined species, all of which occur in this county. They are large heavy birds, with their legs placed so far behind the centre of gravity that they are quite unable to walk on land, but are pre-eminently fitted for diving, which they can accomplish with such rapidity as to

easily escape the discharge from a gun, disappearing under water simultaneously with the flash. They are not inferior in their diving and swimming powers even to the Cormorants, although they use only their legs and not their wings in swimming, and are consequently most destructive to fish, on which they almost exclusively feed, often pursuing them to great depths in the sea. They are all dispersed over the whole Northern hemisphere, are migratory, and breed in high northern latitudes, constructing large rude nests of rushes by the waterside, and lay two or three dark olive eggs, sparingly spotted with darker brown. The nestlings, like young Ducks, can swim almost as soon as hatched. The Divers have extremely compressed tarsi, and the broad feet are completely webbed. They principally visit us in autumn and winter, generally keeping to our bays and estuaries, seldom venturing inland, although in North America we used to see the Great Northern Diver or "Loon" on every freshwater lake we visited.

Great Northern Diver. *Colymbus glacialis*, Linn.

[Loon, Imber (young).]

A winter visitor, of frequent occurrence, both on the north and south coasts; and it has also been observed a few times in summer. The specimens obtained are usually either immature birds, or adults in winter plumage, but old birds in partial summer plumage are not unfrequent; examples in full breeding-plumage are very rare.

The Great Northern Diver is the largest of the three species of Diver (*Colymbus*) which visit our waters in the autumn, and remain off our coasts during the winter, and is also the one which selects the most northerly stations for its breeding-quarters, its nest never having been (according to Mr. Dresser) detected anywhere in the United Kingdom. In their breeding-dress the adults are extremely handsome birds, but in this stage of plumage they are rarely obtained in the south, and the adult birds do not so frequently enter our estuaries as the young birds of the year, but keep out on the salt water. We have seen them occasionally off Ilfracombe, where one day three splendid old birds flew together along the shore, and we have also seen a fine-plumaged adult close to the little

landing-stage at Lundy. Hardly a winter passes without one or two immature birds being seen on the Barnstaple river, and occasionally examples approaching the full plumage have been obtained. These birds are splendid divers; as they plunge under water at the flash of a gun they are not easily shot, and it is often a very long chase before one is secured. Only the head and a portion of the neck are visible when the bird comes up to breathe, as it is able to keep its body submerged.

The Rev. Thos. Johnes records a specimen which he saw alive in full plumage at Plymouth in the month of July about twelve years before he wrote (1832). It was taken at sea by some fishermen, who were carrying it about as a curiosity for exhibition (Bray's 'Tamar and Tavy,' vol. i. p. 354). The same writer says of the 'Great Imber,' the young of this species, that it is often seen on the coast in Whitsand Bay in the summer, and very high up the Tamar in the winter (*op. cit.*). The Great Northern Diver seldom visits Plymouth Sound, according to Mr. J. Gatecombe, before November, remaining there until March. On one occasion towards the end of winter he counted between twenty and thirty birds, apparently in pairs, in the Sound (J. G., Zool. 1878, p. 53; 1879, p. 112; 1882, p. 62). The late Mr. E. Burt states that this Diver usually leaves Torbay in April, or even earlier; but in 1864 a number returned at the end of May in full breeding-dress, and a pair were killed there which are now in the Torquay Museum. Many were seen on the Kingsbridge estuary in November and December 1850, and immature birds were unusually numerous on Torbay in December 1869 (A. von H., Zool. 1870, p. 2058; 1874, p. 3908); and at Plymouth in the winters of 1872-3, 1874-5, in December 1876, February 1877, February 1879 (J. G., MS. Notes; and Zool. 1873, pp. 3444, 3445; 1877, pp. 46, 162; 1879, p. 207); and on the Taw in 1857-8 and 1878 (M. A. M., Zool. 1858, p. 6014; 1878, p. 129). Great Northern Divers are numerous in winter in Start Bay off Slapton (W. V. Toll); some are occasionally obtained on the Exe estuary; and examples of this species are not rare off Teignmouth.

Adult specimens occurred at the following dates in addition to those mentioned above:—One on the Exe, May 1829 (E. M., Trans. Plym. Inst. 1830, p. 334); one taken alive in Bigbury Bay, June 1838, in full plumage, and five seen off Rame Head on September 17th, 1832 (J. C. B., Nat. Hist. S. Devon, p. 214); one on the Taw, November 1859; one in moult killed by Mr. Gatecombe off Seaton, June 15th, 1861; another on the Kingsbridge estuary, May 1865, and another in May 1867 (H. N., MS. Notes); one in full plumage May 30th, 1866, off the south coast (Cecil Smith, 'Birds of Somerset,' p. 535); an old male in full summer plumage October 30th, 1867, in Plymouth Sound; one November 11th, 1875; another November 27th, 1880 (J. G., Zool. 1872, p. 2940; 1876, p. 4783; 1881, p. 52); an adult female and two others shot in Torbay, December 26th, 1872 (J. H. G., Zool. 1873, p. 3493); two shot on the Taw near Barnstaple in nearly full summer plumage at the end of November 1880 (G. F. M., Zool. 1881, p. 68).

The recorded occurrences of immature birds are too numerous to mention.

Mr. E. A. S. Elliot obtained an adult male with traces of summer plumage which weighed 16 lbs.; this example has some of the characters of the Arctic form, the White-billed Northern Diver, *C. adamsi*, Gray, but has been determined to belong to the typical *C. glacialis* by competent authority.

The Great Northern Diver is rarely seen off the North Somerset coast, where the waters of the Channel are too opaque for it to fish in; but there is an instance of one in immature plumage having been shot on the Barrow Waterworks, not far from Bristol, on January 20th, 1881, which is said to have weighed 6 lbs. 10 $\frac{3}{4}$ oz. (Zool. 1881, p. 64). Mr. Cecil

Smith states that the only Somerset specimens he knew of had occurred on inland sheets of water.

In Poole Harbour, on the Dorset coast, little flocks of eight or ten have been seen as late as May by Mr. Pike in full breeding-dress, who informed Mr. Mansel-Pleydell that "East Looe, a boat-channel in Poole Harbour close to the main beach, is a favourite fishing-ground of these Divers, and in 1883 hardly a day passed from October to March without one or two being visible in it" (M.-P., 'Birds of Dorset,' p. 119). On the Cornish coast the Great Northern Diver is common in the winter, coming into the bays after the schools of herrings, as many as twelve having been seen in one day off Mevagissey, and Mr. Rodd thought it was increasing in numbers annually. He had occasionally received examples obtained in October in the full adult dress. It is a question whether the old birds when they have once assumed the full plumage lose it again, as so many have been seen and have been shot in the winter months which still retained it. At any rate the changes they undergo in the autumn moult appear to be but slight, and are rapidly effected.

The Great Northern Diver breeds in Iceland, Greenland, &c., selecting small islands on the edges of lochs, where it makes a nest of dead herbage and lays two large olive-brown eggs, with a few black or dark brown spots.

Black-throated Diver. *Colymbus arcticus*, Linn.

A casual visitor, of rather rare occurrence, from October to March in Plymouth Sound, Kingsbridge estuary, Torbay, and the estuary of the Taw. The specimens met with are nearly always immature birds.

Although this beautiful Diver nests by some of the lochs in the north of Scotland, and in Sutherlandshire is stated to be even more common than the Red-throated Diver, it is not so numerous a species as the preceding, and but few are to be noticed in the autumn and winter on our Devon waters, while an example in the full breeding-plumage is extremely rare. Immature birds have occurred a few times to ourselves on the Taw, on which river we have never known one to have been shot in the adult dress. As might be expected, this Diver is more often seen and obtained on the finer waters of the south of the county.

"Drew had a specimen of this bird to prepare a few years since, which was shot on the Tamar" (E. M., Mag. Nat. Hist. 1837). One in full plumage was shot on Slapton Ley by the late Mr. H. L. Toll, 8th November, 1865, which is now in Sir Lydstone Newman's collection (R. P. N., MS. Notes; H. N., Zool. 1866, p. 527). One January 1867 at Plymouth (J. G., MS. Notes). One December 24th, 1869, on the Taw (G. F. M., Zool. 1872, p. 2929). One February 24th, 1875; another November 21st, 1876; two February 4th, 1879; and one March 8th, 1881, at Plymouth (J. G., Zool. 1875, p. 4448; 1879, p. 207; 1882, p. 62). The Rev. J. C. Green, of Modbury, Ivy-bridge, has informed us that he possesses an immature bird with white throat, which was shot on the Erme in 1887. A fine specimen was shot October 26th, 1889, on the Kingsbridge estuary (E. A. S. E., MS. Notes), where Mr. R. P. Nicholls thinks that immature birds are not uncommon.

Both Dr. Bullmore and Mr. Rodd speak of the Black-throated Diver as rare off the Cornish coast, and were apparently unaware of any specimens in the adult plumage. However, we are indebted to the Rev. J. C. Green, of Modbury, near Ivybridge, South Devon, for the account of two secured near Falmouth in the middle of September 1890, of which he has kindly sent us the following interesting particulars:—"Last June I was staying with a nephew of mine at Portscatho on the Cornish coast, near Falmouth, and he told me that a grocer in the town had two stuffed Divers, but did not know what they were. I went with him and saw that they were two lovely adult Black-throated Divers, the one with a perfect black throat, as in the picture in Yarrell, the other with the throat mostly black, but white feathers coming out over the black in many places. The way they were obtained was this:—the man has a boat, and goes out constantly putting down a trammel-net and taking it up in the morning. In the middle of the previous September (1890) he had, on taking up his net one morning, found the bird with the *perfect black throat* drowned in it. About three weeks later, that is, in the early part of October, he found the second bird, and noticing the difference of plumage he supposed it was the female of the other. He had them both very well stuffed and cased in Falmouth. The bird-stuffer called his attention to the fact that the second bird did not seem to be losing its feathers as in a moult, but that the white feathers were coming out over the black ones. He did not catch any more during the winter, but early in March he caught another in the same way, and this was in a transition state from the white to the black, as the other had been from the black to the white."

In Somerset the Black-throated Diver is very rarely seen. Mr. Cecil Smith knew of no examples at the time he wrote his book, but some years after was able to inform Mr. Dresser of an adult slightly changing to winter plumage, which was shot at Williton, on Lady Egremont's property, in December 1875, on some flooded land ('Birds of Europe,' vol. viii. p. 616). On the Dorset coast this Diver is said by Mr. Mansel-Pleydell to appear almost every winter, but generally in the immature plumage.

The young of the Black-throated Diver are to be readily known from those of the Great Northern Diver by their much smaller size, and from those of the Red-necked Diver by the absence on their backs of the numerous white spots which have given that species one of its names, "the Speckled Diver."

In its habits, nesting, and the colour of its eggs, this species exactly resembles the Great Northern Diver, and is very common in the summer-time throughout Scandinavia.

Red-throated Diver. *Colymbus septentrionalis*, Linn.

[Herring-Bone, Sprat Loon, Loon (*N. D.*), Speckled Diver, Wabble (young on the Exe).]

A winter visitor, arriving about the end of October; sometimes nume-

rous in the estuaries of the larger rivers and on the sea-coasts, following the shoals of herrings and sprats. This Diver is more frequently seen on the south coast than on the north, and was especially numerous in the springs of 1855, 1856, 1870; also in January and February 1879. The specimens obtained are usually in immature plumage, but adult birds have not uncommonly occurred, and some have been killed in spring in full breeding-dress. But for some years past this bird has not been so common as formerly on the Exe, and Mr. Gatecombe noticed its decrease in 1878 at Plymouth; however, in the following year it was again numerous in Plymouth Sound in January and February (Zool. 1879, p. 207). In 1885 it had once more become scarce (Zool. 1885, p. 21).

Of the three British species of *Colymbus*, this is by far the most common, and is a regular visitor every autumn and winter to our Devon coast, both in the north and south of the county. On the Barnstaple river we have seen three or four in a day, and have shot specimens both flying past our boat, as well as diving, but, not wanting examples for our collection, have generally refrained from killing them. Like most of the aquatic birds, this Diver is more plentiful in the south of the county, where on Torbay we have seen it in flocks of a dozen or more, and in October have met with some still with red throats, although the colour was not so bright as it is at the nesting-season.

A specimen was shot off Turnchapel on the Cattewater, Plymouth, on August 1st, 1833 (E. M., Mag. Nat. Hist., 1837; J. C. B., Nat. Hist. S. Devon, p. 215). These Divers were numerous at Plymouth in March, April, and May 1855 (B., MS. Notes), and one was shot there on May 5th of that year, having a few red feathers on the neck (T. L. P., Zool. 1855, p. 4762). They were again very plentiful in the spring of 1870. One December 22nd, 1872; two March 1873; a few in February 1877; a pair in full breeding-plumage in the Sound, April 2nd, 1878; very numerous in January and February 1879 (J. G., MS. Notes; and Zool. 1870, p. 2106; 1873, p. 3444; 1877, p. 163; 1878, p. 250; 1879, pp. 206, 207).

The Red-throated Diver is not uncommon on the Kingsbridge estuary, where one was shot in almost perfect summer plumage, October 15th, 1858 (M. A. M., Zool. 1859, p. 6330); and a male in full dress in May 1866 (H. N., Zool. 1866, p. 527); and others occurred in December 1890 (E. A. S. E.).

Some may be seen in most years in Torbay. Many were seen in the spring of 1870, and one in full plumage was procured at the beginning of March (A. von H., Zool. 1870, p. 2098); this Diver is also frequently seen on the coast at Teignmouth. One changing to winter plumage was killed on the Exe estuary in October 1841, and a second a few days after; while one in full breeding-dress was shot in the spring of 1855 (F. W. L. R., MS. Journ. iii. p. 121); and we ourselves saw many immature birds, or "Wabbles," on the same estuary in 1855 and 1856. A specimen shot on the Clyst, April 20th, 1863, was in nearly full breeding-plumage (W. D'U.). One was obtained off Exmouth, March 28th, 1867, in full plumage (C. S., MS. Notes), and another at Dawlish, May 5th, 1880; another off Exmouth early in May 1890, with red throat (R. Green).

Mr. Rodd, who often watched the "graceful and wonderful movements" of this species in the water, remarked "the ease with which it captures a fish, and the large size of those which it can swallow whole" (B. of C. p. 155). For the same reasons we have already given for the scarceness of Terns and Divers off the coast of Somerset, this common species is rarely seen in that county, and the only one Mr. Cecil Smith could

mention was picked up dead by the side of a small pond near Taunton. In the clear waters off Dorsetshire the "Sprat Loon," as it is there called, is common enough, and examples with the red throats have been often procured, especially off Weymouth. Mr. Pike has shot them in this plumage "with the wing-feathers moulting to such an extent that the birds were incapable of flight"—a proof, Mr. Mansel-Pleydell believes, that these birds "must swim down the coast from their northern breeding-haunts, or else that, like the Penguins, they moult very rapidly" (B. of D. p. 121).

In their speckled plumage, when the head and the whole of the back are of a dark lead-blue plentifully dotted with white spots, and with all the underparts pure white, the immature birds are very handsome, quite as much so, we consider, as the adult birds, whose red throats hardly compensate for the loss of this pretty speckled dress.

The Red-throated Diver breeds commonly in the north-west of Scotland, where its wild cry is one of the summer sounds, and is considered to portend rain, hence obtaining for the bird the name of "Rain Goose."

Family **PODICIPIDÆ.**

THE GREBES.

All the five species of Grebe upon the British List have been met with in Devonshire. Only one of them is a resident, viz. the Little Grebe, or Dabchick; all the rest being autumn, winter, and spring visitors, and none of them are very common. In their habits the Grebes are very similar, as they all resort to freshwater ponds and lakes at the breeding-season, and build nests of aquatic plants on the muddy banks, or on masses of vegetation floating upon the water. The eggs are two to four in number, white when they are first laid, but soon becoming stained of a clay colour from the muddy feet of the birds. The nestlings are at first covered with down marked with longitudinal stripes. In the autumn and winter all the northern species migrate to the south, and are then commonly met with in salt water. The adults are remarkable for their singular plumage in the nesting-season,

some of them presenting a grotesque appearance with their hoods, tippets, ears, and horns, as the feathers around the head developed in spring have been variously termed. In winter these feathers are either wholly or partially lost. The tail is quite rudimentary, being represented by a tuft of downy feathers. One of the finest species, the Great Crested Grebe, has been well-nigh exterminated, owing to the fashion which prevailed at one time amongst ladies to carry muffs made of the skin of the silvery-white breast, which was also used for tippets and for trimming hats. The toes of the Grebes are not webbed like those of the Divers, but most curiously flattened out and covered with scales, closing one over the other so as to offer as little resistance as possible to the water in making the forward stroke when swimming. They are most expert divers, and difficult to shoot, as they disappear under water like a flash when alarmed, and when they come up to breathe they are able to keep their bodies submerged, and only show their heads and necks, or even only the tip of the bill, above water. Some of them continually pluck and swallow their own feathers. Their food consists of fish, mollusks, insects, and worms.

Great Crested Grebe. *Podiceps cristatus* (Linn.).

[Tippet Grebe, Great Dabchick.]

A winter visitor, of frequent occurrence off the coasts and in the larger estuaries, but seldom seen inland, and never abundant, being generally met with singly, and only rarely in small parties. It is seldom obtained in full breeding-plumage, and does not often occur in spring.

In its full adult summer plumage this, the largest of our British Grebes, is a very singular-looking bird. It formerly bred on many lakes and ponds throughout the kingdom, particularly on the Norfolk Broads, but it has been almost exterminated, and now nests only on a few sanctuaries where it is carefully protected. In the autumn and winter it is far from a rare bird on our Devon waters, and appears to be especially fond of Torbay, where many specimens, some in full breeding-dress, have been obtained. In the Gallery of British Birds at the South Kensington

Museum we have seen a fine pair labelled "Torquay," which were presented by Mr. Coningham. On the North Devon rivers we have ourselves seen this Grebe in the winter, and have known several to have been procured in immature plumage, while in October 1891 one in perfect adult dress was shot near Barnstaple. We know of no instance of the Great Crested Grebe having been detected nesting in the county, although the South Devon Leys, if they were less disturbed, would seem to offer very tempting situations for them to breed in. Although it always resorts to freshwater ponds at the breeding-season, this Grebe is not averse to the salt water, where we have ourselves frequently seen it, and it has been met with at some distance from the shore. It is one of the species of Grebe which plucks and swallows its own feathers, even the nestlings indulging in this curious habit, which Mr. Meves considered was for the purpose of protecting the stomach from being injured by the large fish-bones which are often swallowed by the birds.

At Plymouth a Great Crested Grebe occurred March 5th, 1853; another January 7th, 1854, and another December 8th, 1855 (B., MS. Notes); several more in February 1870; one on January 3rd, 1875, "the first seen for a long time there"; another December 1879, and another January 1881 (J. G., Zool. 1870, p. 2100; 1875, p. 4372; 1880, p. 48; 1881, p. 195).

Many immature specimens have been shot on the Kingsbridge estuary in winter (R. P. N., MS. Notes). Two in full dress, having the tippet fully developed, have occurred near Kingsbridge (H. N., MS. Notes); and we ourselves saw an example of this Grebe at Slapton Ley in January 1856. A female was obtained near the mouth of the Avon, December 24th, 1875 (R. P. N., Zool. 1876, p. 4804).

In Torbay the Great Crested Grebe was noticed in small parties in March and April 1859 (H. S., Zool. 1860, p. 6794); others in the winter of 1864-5 (C. S.); and a few are seen in Torbay usually every winter (Von H., Zool. 1874, p. 3907).

On the Exe estuary the Great Crested Grebe has occurred as follows:—An old bird and a young one in May 1829 (E. M., Trans. Plym. Inst. 1830, p. 333); a female January 15th, 1833 (F. W. L. R.). One in November 1848 (R. C.); an adult male in full breeding-plumage, February 1855 (F. W. L. R.); an immature bird January 15th, 1877 (W. S. M. D'U., Zool. 1877, p. 105); and another immature specimen, October 1881.

Along the whole of the S.W. coast from the Land's End to Poole Harbour the Great Crested Grebe is not uncommon in the winter, flocks of twenty or more having been seen off Poole in November 1882. To the county of Somerset it is a rare visitor, one occasionally being obtained on ornamental waters inland, and an immature specimen was seen by us at Weston-super-Mare.

The Great Crested Grebe is met with commonly throughout Central and Southern Europe, in Africa and Asia, being numerous in Northern India, and is stated to occur as far to the East as Japan.

Red-necked Grebe. *Podiceps griseigena* (Bodd.).

A casual visitor, of occasional occurrence, in late autumn and winter in our bays and estuaries. Immature birds were especially numerous in the early months of 1850, 1870, and 1881. Some adults have been

obtained on Slapton and other Leys and on Kingsbridge estuary. Young birds have the neck striped, occasionally with some bright red on the upper part of the breast.

The Red-necked Grebe comes next in size to the Great Crested Grebe among our five British species, and is by far the rarest, especially in the S.W. counties. We know of only three examples from North Devon—one which was shot from the North Walk at Barnstaple in full summer plumage many years ago, another near that town in February 1850 (Zool. 1851, p. 3035), and another in February 1870 in immature plumage, which we have in our collection. More have been procured in the south of the county. Mr. J. Gatecombe saw a specimen of this Grebe in the market at Plymouth on 10th January, 1881, and at the time he recorded it (Zool. 1881, p. 195) added the following note:—"With regard to the Red-necked species, I have often been puzzled with its great variation in size; so much so, indeed, that I have almost been inclined to think there might be two species or at least races of it [he was quite correct]. I have also met with specimens like that mentioned by Mr. D'Urban in the 'Zoologist' a short time since, having stripes on the cheek and neck; but these markings are undoubtedly indicative of immaturity, as in the young of the Great Crested Grebe; yet the examples I have seen so marked happened to be unusually large ones. The bills of the Red-necked species, too, I find vary considerably both in length and thickness." The large-billed birds had probably wandered from America. On February 17th, 1880, Mr. Gatecombe had seen two examples of the Red-necked Grebe in Plymouth Market, and had examined them and found in their stomachs small fish, portions of crabs, sand, and a great quantity of feathers; "but I am sorry to add," he writes, "that the skins of these scarce birds were cut up for the purpose of decorating ladies' hats" (Zool. 1880, p. 248).

Latham, in the supplement to his 'Synopsis of Birds' (1787-1801), speaks of a Red-necked Grebe having been shot at Teignmouth in January. Five specimens were seen together at Slapton Ley early in 1809, and four of them were shot (Montagu, Orn. Diet., Suppl.). One killed in the month of June near Plymouth was in Mr. Drew's collection (E. N., Trans. Plym. Inst. 1830); and another was obtained there October 1861; another March 1870; two in the Market, February 1880; two more January and February 1881 (J. G., Zool. 1861, p. 7848; 1870, p. 2142; 1880, p. 240; 1881, pp. 195, 198).

Three immature birds were shot on Torbay, February 1870; another January 19th, 1871; another October 1876 (Zool. 1870, pp. 2098, 2142; 1871, p. 2631; 1876, p. 5161). One at Teignmouth in January 1850, and another in changing plumage February 22nd, 1870 (C. S., Zool. 1870, p. 2106).

Messrs. Henry and R. P. Nicholls have found this Grebe fairly common on the Kingsbridge estuary; and Mr. Elliot says he has had one or two well-marked birds brought to him in the autumn; one occurred near Kingsbridge in February 1888 ('Field' for February 25th, 1888).

An immature bird was procured at Topsham in 1850 (F. W. L. R.). Two were seen by us, and one shot, in a flooded marsh above Topsham in December 1852; and a young male with striped neck fell to the gun of Mr. John D'Urban Tyrwhitt-Drake, on the Exe estuary, off Starcross, January 8th, 1881 (W. S. M. D'U., Zool. 1881, p. 58).

The Red-necked Grebe has never been known to breed in the British

Islands. It nests commonly in Denmark, in the south of Sweden and Norway, in various parts of Russia and Germany, also in N. Africa, and a large-billed form is said to occur in Asia and in N. America (Dresser, B. of E. vol. viii. p. 643). Mr. Cordeaux considered, from his experience of this species in Lincolnshire, that it was more marine than any other of the Grebes.

It is singular that Mr. Rodd should have considered the Red-necked Grebe a common species in Cornwall, stating that it was quite as numerous as the Great Crested Grebe. A beautiful adult specimen was shot at Durgan in the spring of 1866. Mr. Mansel-Pleydell mentions several from Dorsetshire waters, and considered it rare. In Somerset it is very rare; one was obtained at Taunton in February 1870, and another in the same month in the following year on the moors at North Curry.

Slavonian Grebe. *Podiceps auritus* (Linn.).

[Horned Grebe, Dusky Grebe.]

A winter visitor, of not uncommon occurrence in bays and estuaries. In North Devon this species was formerly obtained on the Taw with some regularity nearly every winter (M. A. M., Zool. 1858, p. 6015); and according to Baron A. von Hügel the Slavonian and the Great Crested Grebes are the most numerous of the family in Torbay (Zool. 1874, p. 3907). The Slavonian Grebe was unusually abundant in February and March 1870, both on the north and south coasts of the county. The specimens obtained are generally in immature plumage, adults being extremely rare, but one in the Torquay Museum was obtained on Torbay. Individuals vary considerably in size. This species is of northern distribution.

This is a smaller species than the two Grebes we have already described, and one which some years ago was quite common as a winter visitor to the north and south coasts of Devonshire, and was on the Barnstaple river by far the most numerous of the family, often occurring to ourselves off the Black Rocks at Instow. Although so plentiful in comparison, we have no record of one in the breeding-plumage from the north of the county, nor has this species ever been detected as nesting in the United Kingdom. In Scotland it is, according to Mr. R. Gray, very common on the western lochs, where it assembles and remains until it migrates northwards towards the end of April, and examples in full breeding-plumage are frequently obtained. The gambols of these birds in the spring, when they are chasing and shrilly calling to one another on the water, are described as very entertaining. The Slavonian Grebe has been detected diving and carrying at the same time its young under its wings! In the south of the county many examples have been recorded at various times by Mr. J. Gatecombe from the neighbourhood of Plymouth, but he had to state that Grebes of all kinds were yearly becoming scarcer on the Sound. Many have been obtained on Torbay, the only locality from which one of these Grebes in full breeding-plumage has been reported.

A Slavonian Grebe was shot at Plymouth, December 1853 (B., MS. Notes), and some were obtained there in February and March 1870 (Zool. 1870, p. 2106). One March 25th, 1871 (B., MS. Notes); one December 1878; another January 11th, and a pair January 13th, 1879; others in January 1881, and one November 5th, 1881 (Zool. 1878, p. 115; 1879, pp. 205, 206; 1881, p. 195; 1882, p. 65).

Immature birds have been shot on Kingsbridge estuary (E. A. S. E.), and one which had been just shot at Slapton Ley was seen by us January 21st, 1856 (Zool. 1856, p. 5065), and we believe that we saw another there a few days later.

A Slavonian Grebe occurred on Torbay in the winter of 1864-5 (C. S., *in litt.*); two young birds December 20th, 1869; one January 9th, 1870; and another March 8th, 1870 (Von H., Zool. 1870, pp. 2059, 2098); another January 7th, 1871 (J. H. G., Zool. 1871, p. 2631).

One in immature plumage was shot on the Exe estuary, October 5th, 1839 (F. W. L. R., MS. Journ. ii. p. 126); another October 11th, 1877, and two early in December 1890.

Mr. Gatecombe has recorded a Slavonian Grebe obtained at Seaton, March 1870 (J. G., MS. Notes).

Respecting this Grebe in Cornwall we find Mr. Rodd writing: "A good deal has appeared in the papers about the rarity of the Slavonian or Horned Grebe, but in the different inlets and creeks of Falmouth Harbour, where rushes and reeds offer a suitable retreat, such as St. Just Creek, under Mesack, the Lamorran Creek, the Tresillian River, and the Fal, up to the morass and rushes under Trewarthenick, various species of Grebe, from the Great Crested to the little Dabchick, may be seen every year and throughout the year." However, he considered the Slavonian a less common species than either the Great Crested or Red-necked Grebes. On the Dorset coast it is said to be "the commonest of the genus next to the Little Grebe, especially in salt water," and one was shot in Poole Harbour in mature plumage in March 1872 (M.-P., 'Birds of Dorset,' p. 123). Mr. Cecil Smith knew of only two Somerset specimens.

The Slavonian Grebe is a northern species, very rare in the south of Europe, and breeding in the northern parts of the Continent, in British N. America, &c.

Eared Grebe. *Podiceps nigricollis*, C. L. Brehm.

A casual visitor, in winter and spring, from the South to both North and South Devon.

This is a smaller species than the Slavonian Grebe, and is not so numerous on our Devon waters, but more examples have been noticed in the full adult plumage in the spring, in proportion to its numbers, than of any of the members of the Grebe family we have already described. It cannot be considered a rare bird on our coasts, as examples in the winter plumage are also occasionally obtained, and have occurred to ourselves on the Barnstaple river. The smaller size and the slightly up-turned beak make it easily to be distinguished from examples in the winter plumage of the Slavonian Grebe, and in their summer plumages the two species are very unlike. We have in our collection a very perfect example of the Eared Grebe in the summer dress, which was shot by one of the river pilots, out of a little flock of five, close to Barnstaple bridge, on 7th April, 1865; and on April 18th, 1874, Mr. Cecil Smith received

one which had been caught alive close to that town. The bird afforded us great entertainment when we saw it running about the floor of his library at Lydeard House, perfectly tame and self-possessed. It was in beautiful adult plumage, and, unfortunately, only lived a week, having received a severe bruise at the time of its capture. Mr. Cecil Smith fed it on small fish, worms, and a few beetles. Several adults in summer plumage have been obtained in the south of the county, as will be seen from the list we append.

An Eared Grebe was secured at Plymouth, February 2nd, 1864 (B., MS. Notes); another, an adult in breeding-plumage, March 1870; another March 23rd, 1871, and an immature bird October 1871; one December 16th, 1875 (J. G., Zool. 1870, p. 2142; 1872, pp. 2646, 2940; 1876, p. 4785).

Mr. E. A. S. Elliot has shot immature birds on the Kingsbridge estuary. He obtained one there in November 1891.

An adult, in full breeding-plumage, was shot off Paignton in May 1853, and is now in the Torquay Museum (Von H., Zool. 1874, p. 3908); and another adult was obtained at Torquay, January 7th, 1871 (J. H. G., Zool. 1871, p. 2631).

A perfect example of an adult in full dress, secured at Dawlish, March 22nd, 1874, was seen by us in the flesh. An immature bird occurred on the Exe estuary in November 1851 (F. W. L. R.), and another near Topsham, December 1st, 1863; also an adult December 1867 (E. P., Trans. Devon. Assoc. viii. p. 296); and an immature bird November 1891.

In Cornwall, both Mr. Rodd and Dr. Bullmore considered the Eared more common than the Slavonian Grebe, the former having in his collection a fine specimen in the summer plumage from the Helford river, and mentioning another, which we have also seen, in the Truro Museum, said on the label attached to it to have been caught under St. Just, in Falmouth Harbour. Further to the east this species becomes rarer, and, according to Mr. Mansel-Pleydell, is the scarcest of the genus on Dorset waters, although one or two have been obtained in the adult plumage. We have no record of this Grebe from Somerset. The Eared Grebe is a southern species, nesting commonly in Italy, N.E. Africa, &c., and is very rare in the northern countries of Europe.

Little Grebe. *Tachybaptus fluviatilis* (Tunstall).

[Dabchick, Dipchick.]

Resident, numerous and generally distributed, inhabiting quiet pools and ponds. Breeds. Most frequently seen in winter (November and December), when probably immigrants arrive from other parts, and its numbers are greatly increased. It then frequents the estuaries on the south coast, the Exeter Canal, and sheets of water adjoining the sea. At the end of November 1863, several ascended drains discharging into the river Exe, from a house on its banks, a mile above Topsham, and were captured. The Little Grebe occasionally visits Lundy Island (Trans. Devon. Assoc. viii. p. 309). This, the smallest member of the family, is also the most common, being the only species resident throughout the county. The changes in its plumage are not so conspicuous as in the larger Grebes, the chief one being that in the summer the adult male

assumes a dark red throat, which is lost in the winter dress. Like all the other Grebes, this small species passes the breeding-season on ponds and lakes, and on sluggish streams which are fringed with aquatic herbage, wandering off in the autumn towards the coasts, and in the winter may be encountered on the tideway. We have sometimes met with little flocks of a dozen or more on streams in the winter, and after carefully stalking them in the belief that they were Teal, have been much amused on getting near them to discover what they were as they dived and disappeared. The Dabchick has received from some a bad reputation as a devourer of fish-spawn, but we can affirm that it can get on very well without that dainty, as we have detected it on several occasions passing the summer on cattle-ponds which were quite devoid of fish. On our fishing excursions, in the summer-time, we sometimes came across a family party of Little Grebes, the two old ones swimming and diving about among the white water-lilies, attending on the striped infant Dabchicks (which occasionally climb up on the parent's back), making a charming picture, as it is faithfully rendered in Mr. Dresser's beautiful book ('Birds of Europe,' vol. viii. p. 659).

The Little Grebe has a wide range, being met with from Scandinavia to the Cape of Good Hope; in Asia as far east as Japan; also in Australia and New Zealand.

Family **ALCIDÆ.**

THE CLIFF-BIRDS : GUILLEMOTS AND AUKS.

Resident for three parts of the year on the sea itself, where they live entirely upon fish, the Guillemots and Auks resort to the coast and to various rocky islands only at the nesting-season. They have a general resemblance in their plumage, which is dark on the upper parts and white below, and are most of them remarkable for their numbers. Three of them—the Common Guillemot, the Razor-bill, and the Puffin—breed either upon or in close proximity to our Devonshire shores, and are to be met with in the English and Bristol Channels throughout the year. The Black Guillemot, a very abundant species on the N.W. coast of Scotland and on its "islands gay," seldom migrates, and only occurs by accident very rarely in the south. The Little Auk, the smallest member of

the family, wanders from its Polar summer-quarters, and is not rare as a winter visitor; while the Great Auk, once the king of all the Cliff-Birds, and at the beginning of the century still perhaps resident on some of our northern islands, has been extinct for the last fifty years, and has only a very doubtful connection with the Devon Ornis. Periodically the Cliff-Birds are visited by great mortality, due to gales occurring at the end of the summer when they are in the midst of their moult. They are then unable, in their weakened state, to capture the fry on which they solely subsist, and probably the fish in stormy weather leave the surface and plunge into the undisturbed deeper water. On several occasions we have found the sands of Barnstaple Bay littered with vast numbers of dead Razorbills, Guillemots, and Kittiwakes, with a few Puffins; and the tide has floated their bodies far up Taw and Torridge. Those we examined were only feather and bone, showing that their deaths had been due to starvation. There was a great destruction of Cliff-Birds at the end of September in 1859. The Razorbills appear to suffer more than either the Guillemots or Puffins; severe storms in 1872, and again in 1880-81, caused death to a vast number. On the coast of Brittany, myriads of Puffins also perish when a gale comes upon them while they are in moult. But hardly a season passes without a few of the Cliff-Birds being found dead upon our Devon coasts after gales in the autumn and winter.

Razorbill. *Alca torda*, Linn.

[Razor-billed Murre.]

Resident and abundant, breeding on Lundy Island in some numbers, and also sparingly on some of the cliffs of the north and south coasts; but on the latter it is most numerous in winter (Zool. 1877, p. 164). It is sometimes very plentiful at Plymouth, large flocks of adult birds assembling outside the breakwater in January and February, and some are

brought in by the mackerel boats (Zool. 1874, p. 3944). Many are destroyed by south-west gales in early spring (J. G., Zool. 1873, p. 3011), as was the case in February 1872 (M. S. C. R., Zool. 1872, p. 3023), and some, principally young birds, are driven inland by stormy weather, and are then picked up in most unlikely places. Mr. J. B. Gould, of the Probate Court, Exeter, brought us a young Razorbill, a bird of the first year, in the flesh, on February 16th, 1872, which was stated to have been killed with a Woodcock (!) by the same discharge of a gun near Exminster (W. D'U.). Great numbers are also frequently found dead on the shore in autumn after heavy gales, especially on the north coast of the county (cf. M. A. M., Zool. 1859, p. 6762). Many Razorbills were thrown up dead on the beach at Seaton after a gale in October 1863.

We have seen Razorbills in August off Teignmouth and Dawlish (1874 and 1883). A young bird still in downy plumage was shot on Torbay, July 7th, 1869 (A. von H., Zool. 1869, p. 1846), and young birds were seen near Plymouth in September 1878 (J. G., Zool. 1878, p. 433).

The Razorbill breeds on Lundy Island, but is not so numerous there as the Common Guillemot, and in all the great nesting-stations of cliff-birds which we have visited we have noticed the same fact. At the end of April or beginning of May the birds arrive at their favourite cliffs, where there is then a great assemblage of Guillemots, Puffins, Gulls, and Cormorants. The noise made by the different birds is sometimes almost deafening, and as one looks down upon them from the top of the cliff the constant arrivals and departures of the birds, the passing to and fro of little parties, the amount of life and motion, as the black and white forms are continually presenting themselves to the eye, have also a bewildering effect upon the senses until they are gradually accustomed to the busy scene. The Razorbill flies beneath the water after the small fish it feeds upon, and may be met with in little parties of from six to a dozen at some distance from the nesting-station, and throughout the autumn and winter these parties may be encountered far up the Bristol Channel, where we have met them off Clevedon and Portishead. In the summer-time we have seen young Razorbills, not long from the nest, on the Pool at Appledore, and gave chase to one on one occasion, being deceived by its resemblance to a Little Auk; but it is a rare thing for any of these birds to enter the estuaries, though we have had specimens brought to us taken high up the estuary of the Exe. The Razorbill lays one large egg, elliptical in shape, on the bare ledges of the cliffs, of a reddish colour, boldly marked with darker blotches, and as there is a great variety in the tints and markings very beautiful specimens are sometimes obtained.

[Great Auk. *Alca impennis*, Linn.

[Gare Fowl.]

A Great Auk is stated to have been picked up dead near Lundy Island in the year 1829. The original account, which appeared in Dr. E. Moore's 'Catalogue of the Web-footed Birds of Devonshire,' published in

the 'Magazine of Natural History,' new series, vol. i. p. 360, 1837, is as follows:—"Great Auk. Mr. Gosling, of Leigham, informed me that a specimen of this bird was picked up dead near Lundy Island in the year 1829; and Professor Jameson suggests that it might have been one which had been obtained by Mr. Stevenson at St. Kilda, and had escaped from the lighthouse keeper at Pladda, about that time, when on its way to Edinburgh (see Edinburgh New Phil. Trans. October 1831)." Mr. J. H. Gurney, Jun., in the 'Zoologist' (1868, p. 1446), remarks that "Mr. T. E. Gosling is more than once referred to as an ornithologist in Bellamy's 'Natural History of South Devon.' This catalogue, written subsequently to Moore's, does not even allude to the Great Auk, from which we may infer Mr. Bellamy partly discredited the specimen said to have been washed ashore at Lundy Island." It should be remembered, however, that Bellamy's work related to the southern portion of the county only, and he might not have thought it necessary to allude to a bird said to have occurred in North Devon.

It is, indeed, only a slender link of evidence that connects this interesting bird, once an inhabitant of St. Kilda, the Orkney and Faroe Isles, which has now been extinct for half a century, with our Devonshire Ornis. We have given above full particulars of all that it is possible to ascertain respecting the alleged discovery of a dead Great Auk off Lundy in 1829, and consider it remarkable that no trace of the bird remains, and that there is no information as to whether its skin was even preserved. But if the statements can be relied upon that early in the present century examples of the bird were occasionally obtained upon the French coast, three having been reported from the neighbourhood of Cherbourg, and two more from that of Dieppe*, there would be no inherent improbability that a Great Auk, in swimming south off our western coasts, should put in at Lundy. At the date when it was said to have been met with it was not known that this species was fast approaching extinction, and the great value attaching to each specimen, since this fact was realized by naturalists, had not then accrued. There are even traditions, handed down from early inhabitants of Lundy, which seem to point to the Great Auk's having formerly nested upon the island, and even since Mr. Heaven's family became its proprietors a large egg was brought to the house which was positively asserted to have been produced by one of these birds. This egg (most probably a double-yelked egg of the Common Guillemot) was kept on the mantelpiece in the dining-room as an ornament, and children in the house were permitted to play with it as a toy, until one day it was smashed! Although it is extremely improbable that the Great Auk ever had a nesting-station so far to the south of its usual habitats (which were rocky islets off the coast of Iceland, and a few other places in the far north), we reproduce the Lundy folk-lore for what it may be worth.

The Rev. H. G. Heaven was kind enough to write us the details in a letter which we communicated to the 'Zoologist' for 1866:—"Lundy

* *Fide* Professor Newton on the Gare Fowl and its Historians in the 'Natural History Review' for October 1865.

Island, September 6th, 1865. With regard to your question whether we have ever seen the Great Auk, I must answer in the negative. There is strong presumptive evidence, however, that the Great Auk has been seen *alive* on the island within the last thirty years; at least, I cannot imagine what other bird it was. The facts are as follows, and I must leave it to more experienced ornithologists to draw the conclusion:—In the year 1838 or 1839 [this is just five years before the *last* Great Auk was obtained in Iceland] as nearly as I can recollect, not, however, more recently, one of our men in the eggging season brought us an enormous egg, which we took for an abnormal specimen of the Guillemot's egg, or, as they are locally termed, the 'pick-billed Murr.' This, however, the man strenuously denied, saying it was the egg of the 'King and Queen Murr,' and that it was very rare to get them, as there were only two or three 'King and Queen Murrs' ever on the island. On being further questioned he said they were not like the 'Picked-bills,' but like the 'Razor-billed Murrs' (*i. e.* the Razor-billed Auk); that they were much larger than either of them; and that he did not think they could fly, as he never saw them on the wing nor high up the cliffs like the other birds, and that they, as he expressed it, 'scuttled' into the water, tumbling among the boulders, the egg being only a little way above high water. He thought they had deserted the island, as he had not seen them or an egg for (I believe) fifteen years till the one he brought to us; but that they (*i. e.* the people of the island) sometimes saw nothing of them for four or five years, but he accounted for this by supposing the birds had fixed on a spot inaccessible to the egggers from the land for breeding purposes. The shell of the egg we kept for some years, but, unfortunately, it at last got broken. It was precisely like the Guillemot's egg in shape, nearly, if not quite, twice the size, with white ground and black and brown spots and blotches. We have never, however, met with bird or egg since, but as the island has become since that time constantly and yearly more frequented and populous, it may have permanently deserted the place. The man has been dead some years now, being then past middle age, and I think he had been an inhabitant of the island some twenty-five or thirty years. He spoke of the birds in such a way that one felt convinced of their existence, and that he himself had seen them; but he evidently knew no other name for them than 'King and Queen Murrs,' which he said the islanders called them 'because they were so big, and stood up so bold-like.' In colour they were also like the 'Razor-billed Murr.' Nobody, he said, had ever succeeded in catching or destroying a bird, as far as he knew, because they were so close to the water, and scuttled in so fast. The existence of these birds had been traditional on the island when he came to it, and even the oldest inhabitants agreed that there were never more than two or three couple. He himself never knew of more than one couple at a time."]

Common Guillemot. *Lomvia troile* (Linn.).

[Mers, Mairs, Murre, Pick-bill Murre, Brown-bill, Willock, Eligoog.]

Resident and numerous all along the coasts in spring and summer, but usually keeps out at sea in winter. Breeds on Lundy Island in immense numbers, on the north coast near Baggy Point, where there are a few, and on some of the cliffs of the south coast in certain localities. Bellamy obtained a young bird, July 23rd, 1830, from Oreston. Mr. Gatcombe mentions one in full breeding-dress December 21st, 1872, at Plymouth, and another on February 7th, 1874 (*Zool.* 1873, p. 3493; 1874, p. 3943). Great numbers were thrown up dead on Braunton Sands after a heavy gale at the end of September 1859 (*M. A. M.*, *Zool.* 1859, p. 6762). Sometimes the Common Guillemot is driven inland, and we were once shown a specimen which had been killed near Topsham Bridge on the river Clyst. A singular variety of a pale colour, almost white, was shot by Mr. Else on Torbay, November 27th, 1883 (*W. Pengelly*, *Zool.* 1884, p. 71), and a pure white specimen was killed by Mr. Drummond, also on Torbay; both these birds are in the Torquay Museum.

The variety known as the Bridled or Ringed Guillemot is met with off Plymouth, according to Mr. Gatcombe, individuals being sometimes brought in by the mackerel boats in spring mixed with specimens of the ordinary form, but only two or three, out of many hundreds of Guillemots examined, belonged to this variety (*Zool.* 1872, p. 2983). Mr. Gatcombe believed that the aperture of the eye is larger than in the normal form, and informed us that the figure of the "Bridled Guillemot" in Morris's 'British Birds' was drawn by himself. Specimens of this variety occurred at Slapton in 1852 (*C. Prideaux*, *Zool.* 1852, p. 3474); on the Tamar, January 29th, 1853 (*J. G.*, 'Naturalist,' 1853, p. 228); on Torbay in 1851, October 15th, 1869, and January 27th, 1872 (*Von H.*, *Zool.* 1870, p. 1984, and *J. H. G.*, *Zool.* 1872, p. 3134); also at Plymouth, April and October 1867 (*J. B. R.*, *MS. Notes*); one on the sands seven miles from Kingsbridge, February 1883, being the only one seen there for eighteen years (*R. P. N.*, *in litt.*). Mr. E. A. S. Elliot, however, informs us that he has had many of this variety, both in summer and winter plumage, brought to him, and that he has shot some himself on the coast in the Kingsbridge district. It has also been met with at Lundy Island, but is said to be rare (*Howard Saunders*, *Yarrell's B. Birds*, 4th ed. iv. p. 73).

Examples of the Bridled Guillemot have also been met with on the Cornish and Dorset coasts.

The Common Guillemot is a very abundant species in both the Bristol and English Channels, and numbers are to be seen on the salt water off both the north and south coasts throughout the year. In April the birds resort to their breeding-stations, of which there are several very populous ones on either side of the entrance of the Bristol Channel, on Lundy off the coast of North Devon, and on Skomer, Skokholm, and the "Eligoog"

Stacks, off the coast of Pembrokeshire, with various smaller nesting-stations on the cliffs fronting the sea on the mainland. The single large egg of the Guillemot is placed on a bare ledge on the cliff, without any nest being made, and in its colour and markings is among the most beautiful of all eggs laid by birds, the Guillemot's eggs from Lundy ranking high for the boldness and variety of their markings. In shape the Guillemot's egg is more pyriform than that of the Razorbill, and is ornamented with a greater profusion of delicate scroll-work and blotches of various shades; while the ground-colour of the egg ranges through numerous tints of white, green, and red. The intertwisted line-markings and blotches upon the eggs of the Guillemots are fancifully ascribed by some to the birds as they sit upon the rocks continually seeing beneath them the long ribbons of the seaweed moved to and fro by the waves! — a theory reminding us of the Patriarch Jacob and his ewes. There is another ingenious idea respecting the egg, which is said never to be blown off the ledges by the wind, however rough it may be, because, "owing to the centre of gravity," it only revolves upon its axis on the same spot! But alas! for theory when confronted by fact, for after rough winds numerous eggs may be seen smashed upon the rocks and shingle beneath, and often the clumsy Guillemot herself, as she flies off towards the water, rolls her own egg over to destruction. While we have been watching them we have sometimes wondered how each bird knew her own egg, when there have been so many closely resembling one another deposited on almost identical ledges. The Guillemots are said to carry their young down to the water, but there is some conflicting testimony as to how they do it.

On Torbay we have found Common Guillemots very abundant in the autumn, when they have been in great variety of plumage, some having then light grey backs, both immature birds and old birds in a transition stage being equally common. Mr. J. Gatecombe recorded from Plymouth the early date at which the old birds resumed the full breeding-dress, noticing some which appeared in it in the first week of January, and considered that this early assumption of the summer plumage had led Col. Montagu to suppose that the Common Guillemot did not vary in its dress at any time of the year. Like the Razorbill, the Common Guillemot very rarely comes into the estuaries, but little parties may be encountered almost anywhere on the salt water at a short distance from the shore at any time of the year. The Common Guillemot flies under water in its pursuit of fish, as we have witnessed the birds doing which are kept in tanks at the Brighton Aquarium, and in the Fish-house at the Zoological Gardens, little silvery bubbles of air ascending upwards to the surface of the water from the birds' bodies.

In the summer-time the farmers who reside around St. David's, in Pembrokeshire, fatten their calves with eustard made from the eggs of the Common Guillemot taken on Ramsey Island, and large quantities are used by sugar refineries.

The Guillemots off the South Devon coast are mainly supplied from the Scilly Isles, and from various nesting-stations along the Dorset coast.

[*Observation.*—Brünnich's or Thick-billed Guillemot (*Lomvia bruennichi*, Sabine). A single example of this Guillemot has been recorded by Dr. Bullmore in his Cornish Fauna as having been shot some years ago at Rosemullion Head. It is an inhabitant of the Arctic seas, and very rarely wanders to the south. It differs from the Common Guillemot (of which some ornithologists consider it only a race) in having a stouter beak and in having the base of the upper mandible of a horn colour, and in a specimen which we have now before us we notice that the basal edges of the upper mandible overlap the lower considerably.]

Black Guillemot. *Uria grylle* (Linn.).

A casual visitor, of rare occurrence, in autumn and winter, to the south coast of the county, principally to Plymouth Sound and Torbay, having only once been detected in the north.

Of this pretty species of Guillemot Col. Montagu writes, "We have seen it rarely on the coast of Wales near Tenby, where a few breed annually; but nowhere else that we could find from thence to St. David's." Now, from our familiarity with the whole of the Pembrokeshire coast, we are inclined to believe that this is all a mistake. Wishing, if we could, to confirm the Colonel's assertion, we have questioned all the likely people we have met, and have also examined every local collection of birds to which we could obtain access, and in not one of these did we find a Black Guillemot, nor had any of the men who were well acquainted with the various breeding-stations of cliff-birds ever seen or heard of this species. Had the Black Guillemot nested, even in small numbers, on the Pembrokeshire coast, it would certainly have occurred some time or other on the opposite shores of Devonshire, where it is almost unknown. The only North Devon specimen we have ever heard of was one which was picked up dead by the side of the Taw in the autumn, and was a young bird of the year.

"Rare; one (black) is in Pincombe's Collection, and a spotted one in Drew's" (E. M., Mag. Nat. Hist. 1837). An adult in winter plumage was obtained near Plymouth, January 1863 (J. B. R., Trans. Plym. Inst. 1862-63; and J. J. R., Zool. 1863, p. 8448). An immature specimen on the Exe estuary, October 1872 (Rev. C. R. Carr). One in winter plumage which occurred in Torbay, and another at Hope's Nose, Torbay, February 1880, are in the Torquay Museum. One in "weather-worn winter plumage" brought to a Stonehouse bird-stuffer, January 16th, 1883 (J. G., Zool. 1883, p. 166), is now in the A. M. M. A young one in the plumage of the first year was obtained in Plymouth Sound, December 9th, 1886 (J. G., Zool. 1887, p. 378).

Mr. Rodd knew of only two in Cornwall; four are mentioned by Mr. Mansel-Pleydell from Dorsetshire, and there is but a single one from Somerset, an adult in winter plumage obtained some years ago near Quantockshead.

The Black Guillemot is very well known in the far north of the British Islands, where we have seen numbers off the N.W. coast of Scotland. It is the familiar "Tysty" of the inhabitants of Orkney and the Hebrides,

and the "Doveky" of the whaler and Polar explorer. In the summer its plumage is all over a rich greenish black, with the exception of a white patch on the wings; while in the winter it becomes almost entirely white, with a few black spots on the top of the head and neck, and some black bars upon the back and rump, and with the tail and wings black, the white patch on the wings remaining as in summer. This singular change of colour is doubtless protective; the white plumage of the birds in the winter would correspond with the snow-covered cliffs, and render them less liable to be discovered by foxes and birds of prey.

The Black Guillemot does not appear to wander far from its summer stations, or there would be more instances of its appearance on our Devonshire coasts.

Little Auk. *Mergulus alle* (Linn.).

A casual visitor, of occasional occurrence, generally in the autumn and winter months; usually found either dead or in an exhausted condition after storms, on both the north and south coasts of the county. It was very numerous in 1868, and again in 1875, when specimens occurred at Plymouth, Mothecombe, Torquay, and Barnstaple.

This is the smallest of the cliff-birds, and is a native of Polar seas. It appears as an irregular winter visitor to our southern coasts, and cannot be considered very rare, being occasionally picked up dead after stormy weather, sometimes at places far inland. In North Devon we received one which had been found dead on the sands on the Barnstaple river. This was a young bird with bluish-grey cheeks; others have been secured near Barnstaple in various years. An adult in winter plumage was captured in the autumn by a friend of ours when bathing at Torquay. He saw the little bird swimming near him on the water, and, diving beneath it, caught it with his hand. The adults in the summer plumage have black throats, which become white in the winter dress. The Little Auk or 'Rotche' is described as an oceanic bird, keeping far out at sea, and approaching the cliffs only at the nesting-time. It is a common winter visitor to the Orkneys.

One was knocked down with a stone by a boy under Plymouth Hoe, December 19th, 1850 (R. A. J., 'Naturalist,' 1851, p. 60; and B., MS. Notes). Another on the Hoe, December 1856; one November 1862 (J. B. R., MS. Notes). One was shot near Plymouth in October 1863; another December 19th, 1867; another was knocked down with a stone at Cann Quarry on the Plym, six or seven miles from the coast, December 19th, 1869; one in the spring of 1870; one shot in Plymouth Sound, January 26th, 1875 (J. G., Zool. 1863, p. 8832; 1870, pp. 2026, 2143; 1875, p. 4373; and MS. Notes; B., MS. Notes).

Montagu met with two specimens, one found dead on the coast of South Devon, December 4th, 1804, and another taken alive in a pool of fresh water close to the estuary of Kingsbridge (Orn. Dict.). One was picked up dead on the shore at Mothecombe in Erne Mouth, December 6th, 1874, and several have occurred of late years on the Kingsbridge estuary and on the adjacent shores (H. N., MS. Notes). One was caught by a dog near Blank's Mill, on the Kingsbridge estuary, December 2nd, 1886 (E. A. S. E., MS. Notes).

One was picked up dead in Torquay Harbour in 1856 (Von H., Zool. 1874, p. 3908), and another caught by two fishermen in Torbay in 1875 is in the Torquay Museum. Thurton and Kingston mention one that was shot in the neighbourhood of Teignmouth.

A Little Auk was found dead on the cricket-field at Exmouth in January 1890 after violent westerly gales.

An immature bird was found dead on the sands at Barnstaple in August 1859. Three were picked up dead on the banks of the Taw, between Barnstaple and Instow, at the beginning of September 1868 (G. F. M., Zool. 1868, p. 1460). One from North Devon, December 7th, 1869 (C. S.), and another was caught on the Taw near Barnstaple about December 22nd, 1875 (M. A. M., Zool. 1876, p. 4814).

Other specimens have occurred in the county besides those mentioned above, but the dates were not recorded. Curiously enough, the Little Auk was obtained in three years on the same day, viz. 19th December (1850, 1867, and 1869), at Plymouth.

Respecting its appearance in Cornwall Mr. Rodd writes: "During the winter months this small sea-bird comes to us from the north in little parties of ten or a dozen, which soon get broken up and dispersed, and single individuals find their way into our harbours and estuaries." Mr. Mansel-Pleydell states that it is not rare as a winter visitor on the Dorset coast, being chiefly picked up after heavy gales. Mr. Cecil Smith mentions two which had come beneath his notice—one caught alive near Taunton, and another picked up dead on the shore at Burnham; and there are other instances of its occurrence in Somerset.

Puffin. *Fratercula arctica* (Linn.).

[Sea Parrot, Lundy Parrot, Coulter-neb, Nath, Pope: *Dev.*]

Resident, being found on some parts of our coasts at all times of the year. It is scarce on the south, but very abundant on the north coast in summer. Great numbers breed in burrows on the slopes of Lundy Island, arriving there early in May. This island derives its name from the Scandinavian *tunde*, a puffin, and *ey*, an island (H. Saunders, Yarrell's B. Birds, 4th ed. iv. p. 91). On the south coast adults occur occasionally in summer, as well as in winter, but they are most numerous in February, when examples are sometimes picked up dead on the shore. Young birds have also been obtained several times in summer on the south coast.

Unless one actually visits Lundy and Skomer Islands in the months of May and June it is impossible to form any conception of the incredible number of Puffins which annually frequent them at that season. At some places in both those great nesting-stations of cliff-birds it would seem at that time as if there would not be room for another Puffin. The water beneath the cliffs, almost as far from land as the eye can reach, is black with a multitude of the birds; little flocks and single birds are flying to and fro, some of them as they come towards the land having bunches of small fish depending like ribbons from the edges of their mandibles, being on their way to feed their young. Row upon row they are seated upon the rocks and upon the edges of the cliffs; fresh ones are continually arriving, as one after another from the line becomes restless and flies off towards the sea. Besides the countless numbers

before the eye, there is a vast Puffin population underground in their innumerable burrows, which tunnel a few inches beneath the soil in all directions, so that when the ground is sandy or friable the foot of the visitor frequently slips through, causing panic to the patient bird brooding over her freshly hatched young, or sitting on her white, grey-blotched, egg. The Puffins as often dispossess the rabbits of their earths as they dig out their own abodes. Sitting down among the sea-pinks, briar-roses, and snow-white bladder champions, near the edge of a cliff, we have contemplated with amusement the busy scene, having rows of the birds perched within a few feet, staring at us inquisitively with their comical little eyes. One day a snow-white Puffin, with only its wings black, flew within a yard or two of where we were reclining, and we have seen a perfect albino, but varieties appear to be rare.

After the nesting-season is over (that is, about the beginning of August) the Puffins leave the cliffs and spend the rest of the year far out upon the sea, being oceanic birds, diving and (like the Auks and Guillemots) flying after the fish beneath its surface. We have occasionally picked up dead Puffins on the northern coasts of Devon and Cornwall, but have found but few lying upon the sands at those seasons when a great mortality has occurred among the other cliff-birds. Young Puffins resemble immature Little Auks in having grey cheeks, and a curious fact respecting the autumnal moulting of the adults of this species is their shedding the horny covering of their strangely coloured beaks, which after this moult become less in size and different in shape, as was ascertained by Dr. Louis Bureau from observations on the coast of Brittany, and communicated by him to the 'Transactions of the Zoological Society of France.' There is an epitome of his paper, accompanied by an interesting illustration, in the 'Zoologist' for 1878. The curious puckered yellow skin, forming a kind of rosette on either side of the gape, is also modified, so as almost to disappear, at the same time; and another change is effected in the region of the eyes, the horny patches of skin above and below the orbits being lost until the following spring.

Montagu says the Puffin occurs occasionally in winter in the south of Devonshire, and mentions a specimen that was brought to him on February 27th, 1811 (Orn. Dict.). Dr. E. Moore knew of only one obtained in Plymouth Harbour (Mag. Nat. Hist. 1837). Bellamy speaks of a very young bird having been captured there (Nat. Hist. S. Devon, p. 214), and another occurred July 24th, 1855; an adult July 6th, 1857; and a young one August 8th, 1863 (B., MS. Notes). A fine specimen was secured at Plymouth, January 15th, 1853, and another on January 3rd, 1873; but Mr. Gatcombe observes that its occurrence in winter is very uncommon on our southern coast ('Naturalist,' 1853, p. 228; and MS. Notes). Mr. J. Brooking-Rowe has two specimens from Plymouth Sound in his collection. One was obtained at Plymouth, June 7th, 1872; one January 3rd, and another was found dead on the beach February 5th, 1873; some off Plymouth in February 1874; one at the end of July 1880 (J. G., Zool. 1872, p. 3167; 1873, p. 3445; 1874, p. 3944; 1881, p. 51).

A young bird was shot in the mouth of the river Erue in July 1852 (J. B., 'Naturalist,' 1853, p. 204); specimens have also been met with at the mouth of the Kingsbridge estuary (H. N.).

We had an adult brought to us which was taken alive on Torbay, May 13th, 1853. One was picked up dead on the beach near Torquay, February 9th, 1870, where Baron A. von Hügel observes that Puffins are unusual visitors (Zool. 1870, p. 2098).

A young bird was shot in September 1844 on the Exe estuary, where Mr. Ross considered the Puffin to be very rare (MS. Journ. iv. p. 86). Mr. Cecil Smith met with one or two off Exmouth in winter ('B. of Somerset,' p. 553).

Numerous Puffins nest on the Scilly Isles; also along the Dorset coast, where Mr. Mansel-Pleydell states that they appear "almost to a day during the last week in March."

Puffins wander up the Bristol Channel, and are sometimes seen off the North Somerset coast.

ADDENDA AND CORRIGENDA.

White's Thrush (p. 6).—A second Cornish example was obtained on the Scilly Isles early in December 1886 (T. Cornish, Zool. 1887, p. 114).

Ring-Ouzel (p. 8).—In Carrington's 'Dartmoor,' published in 1826, the bird which appears to the members of the Oxenham family before death is described "with a white crest." This is probably a misprint for "white breast," as it is given in 'Familiar Letters' of James Howell, from whence Carrington derived his information (*cf.* R. W. Cotton in Trans. Devon. Assoc. vol. xiv. (1882), p. 221). In his 'History of Devonshire' Mr. R. N. Worth has recorded a very recent instance of the Oxenham "Omen." A *white bird* is said to have appeared "outside the windows of a house in Kensington a week before the death of Mr. G. N. Oxenham, then head of the family, in 1873. The bird refused for some minutes to be driven away, and a sound like the fluttering of wings is stated to have been heard in the bedroom."

Wheatear (p. 9).—Mr. E. A. S. Elliot sometimes meets with very large males in his district.

Black Redstart (p. 12).—The young males, in their second year's plumage, when the alar patch is very faintly indicated, were by some ornithologists considered a distinct race, and were called *Ruticilla cairii*. It is said that they both sing and breed in this plumage, and Mr. O. V. Aplin has informed us that in Switzerland they were to be found lower down on the mountains than the full-plumaged adults, which keep very high up. On account of the valuable communications made by Mr. J. Gatcombe on the Black Redstart to the 'Zoologist' and to various ornithological works, we have selected this species to be the subject of one of our plates, and have figured an adult male, as well as a young male in the *cairii* dress, the latter taken from one shot by ourselves towards the end of March in our garden at Bishop's Lydeard, near Taunton.

Lesser Whitethroat (p. 18).—This species is marked as occurring at Rousdon in Sir Henry Peek's Catalogue.

- Blackcap** (p. 19).—Mr. T. R. A. Briggs found that this Warbler fed much on the berries of *Leycesteria formosa* in August. The Robin will also eat these berries, which have a very strong and peculiar flavour. We have seen Blackcaps eating pears in October (1887) at Exmouth. To the quotation from the 'Zoologist' for 1891 add: "and a pair frequented a garden at Ilfracombe up to January 8th, 1891."
- Dartford Warbler** (p. 20).—We find the following entry in a notebook belonging to Col. Montagu, apparently written in February 1799:—"I saw two or three Dartford Warblers in November in a turnip-field. The turnips were exceedingly thick, under the leaves of which they secreted themselves [so] that it was impossible to shoot them. They moved a great distance under concealment, so that 'twas very difficult to make them take wing."
- Goldcrest** (p. 21).—According to observations made by Mr. Briggs, the Golderest sings through the greater part of the year, from January to October. He found nests from April to August with unincubated eggs, and thought the same pair built more than once in the season.
- Fire-crest** (p. 22).—As we are frequently having adult male Golderests forwarded to us for this bird, it may be useful to state that the Fire-crest, in all stages of plumage, is to be easily recognized *by the white line above the eye.*
- Wood-Warbler** (p. 24).—Mr. Briggs records the dates on which he first heard the song of this bird in fifteen years: once on April 14th (1869); four times in the third week of April; six times in the last week of April; and four times in the first week of May. On June 18th, 1870, he heard one having a remarkable variation in its song—sometimes, instead of the final long note, the bird introduced others which resembled the chattering notes of the Common Wren. Mr. Briggs observed that the nest of this Warbler is composed of fine dry grass without a single feather, and is lined with the same material, a few hairs being sometimes used; and occasionally the outside of the nest is constructed of dead leaves.
- The Wood-Warbler is marked as occurring at Rousdon in Sir Henry Peck's Catalogue.
- [**Icterine Warbler** (p. 24).—According to Mr. Howard Saunders ('Manual of B. Birds,' p. 70), *Hypolais icterina* (Vieillot) is very abundant in the north-east of France, extending westward as far, perhaps, as the mouth of the Somme, to the west of which river a very closely-allied species, *H. polyglotta*, is found. The latter is common round Paris and west of the line of the Seine, as well as in the southern provinces; also in Portugal, Spain, and N.W. Africa. Most probably Bellamy's bird belonged to this western form.]
- Grasshopper Warbler** (p. 28).—Marked as having been seen in the parish of Rousdon in Sir H. Peck's Catalogue.
- Dipper** (p. 30).—Mr. Briggs heard one or two Dippers singing from alder branches overhanging the Plym River, September 6th, 1887,

and observed that the song had considerable variety, reminding him of some of the notes of the Thrush (but given with much less power), mingled with one or two of those of the Redbreast, and was of the character of the melody appertaining to the Thrushes. In our wading up the North-Devon streams when trout-fishing, we have come across numerous nests of the Dipper, which we have found to be constructed of very varying materials; some are built entirely of dead oak-leaves, others of moss and dead leaves interwoven, resembling large nests of the Common Wren. The nests are generally dome-shaped, and are sometimes built in holes in masonry or in rocks. We were one day leaning against a moss-covered rock by the side of a stream, and in so doing inadvertently imprisoned a Dipper, which flew out of her nest when we moved. Like many nests we have seen of the Common Wren, it harmonized so well in its materials with its surroundings that it had easily escaped our notice. It contained fresh-laid eggs.

Blue Titmouse (p. 35).—The grub in the centre of the hard round galls on the oak made by *Cynips kollari* is a favourite food of the Blue Tit. The oaks in Devonshire were completely covered with these galls about 1853, so much so as to attract general attention to them; but, thanks to the Tits which picked open the galls and extracted their occupants, they are now comparatively scarce.

Marsh-Titmouse (p. 35).—This Tit is very fond of thistle-seed, and in the autumn may be frequently seen clinging to the thistle heads, extracting the seed with its beak, and carrying them to a neighbouring hedgerow to pick out the contents. On 5th June, 1870, Mr. Briggs saw a Marsh-Tit carrying something away from a plant of *Mercurialis perennis*, and found it had lost some of its seeds, one having been probably taken by the bird; and detected another Marsh-Tit extracting the seeds from the berries of the honeysuckle (on September 4th, 1876). Marsh-Tits, like Blue Tits, sometimes obtain a meal from the horse-droppings on the highway; they are very fond of seeds, and will pick up and carry off grains of maize thrown out for poultry. Mr. Briggs generally found the nest of this Tit in a hollow apple-tree [we have found willows the usual trees selected by this species], but on May 25th, 1871, he found one in a hole between some stones on a bank near Upperton, Bickleigh; the bird hissed at him when on the nest.

Pied Wagtail (p. 39).—A pair of these Wagtails were seen pulling the fur from off a dead mole in the court at Fursdon, May 2nd, 1855 (T. R. A. B.).

Grey Wagtail (p. 40).—Mr. Briggs found a nest containing three nearly full-grown young ones, which was built against a bank of earth at Tamerton Foliot, near a mill-stream. The nest was small, and not very neatly constructed, and the old birds were agitated and vociferous. This was on 24th July, 1860, and, from the lateness of the date and the slovenliness of the nest, we believe that the birds

had met with some accident to their first or even second brood, as all the nests we have taken of this Wagtail have been singularly compact and well made.

Golden Oriole (p. 46).—The Rev. Dr. Kerr obligingly informed us that one of these birds was seen by him near St. Mary Clyst in 1890. He first saw it in his orchard in the month of August quite close to him, and it did not seem at all wild. He watched carefully for another sight of it, and had nearly given up all hope of it, when it appeared again in September, and, after remaining a few days, finally disappeared.

Spotted Flycatcher (p. 52).—On 31st May, 1883, Mr. Briggs found a nest of this bird at Fursdon with five eggs, that was built on the top of a Hedge-Sparrow's nest in which a brood had been hatched that season. It was placed in a hollow behind some ivy stems against the bole of a spruce, and on 6th July following there was a second nest with four eggs on the same site.

Pied Flycatcher (p. 53).—Marked as occurring in the parish of Rousdon by Swaysland in Sir H. Peek's Catalogue.

Serin (p. 62).—A specimen of the Serin was captured by an old bird-catcher between Exmouth and Budleigh Salterton, November 29th, 1891 (W. E. H. Pidsley, Zool. 1892, p. 114). Mr. Cecil Smith (B. of Somerset, p. 180) recorded an example of this small Finch which was shot at Taunton in January or February 1866, and was added to Mr. Byne's collection. Mr. Smith, however, considered that it had, in all likelihood, escaped from a cage. The Serin is a native of Southern Europe and North Africa.

Hawfinch (p. 63).—We have seen Hawfinches in the month of June in the beautiful vale of Wington in Somerset, where they were doubtless nesting. Mr. Mansel-Pleydell mentions two instances of a nest having been found in his county of Dorset, to which he considered the bird was chiefly an occasional winter visitant.

Tree-Sparrow (p. 64).—Occurs at Rousdon (Sir H. Peek's Catalogue).

Mealy Redpoll (p. 67).—This species is absent from the Dorsetshire list of birds.

Twite (p. 68).—Also marked in Sir H. Peek's Catalogue as having occurred at Rousdon.

Common Crossbill (p. 71).—In addition to the occurrences of this bird which we have given, we may mention a small flock reported by Bellamy to have visited Yealmpton at the beginning of October 1835; another seven years before he wrote (1838), and another twenty-five years before (N. H. S. D. p. 383).

Cirl Bunting (p. 75).—Mr. Briggs observes that this Bunting and the Common Bunting appear to be as much summer and early autumn songsters as the Yellow Bunting. He thought that as a rule the Cirl Bunting sings from a greater elevation than the Yellow Bunting,

and noted that it commenced to sing in February and continued its song until April and May, resuming it again in August until December. The Gird Bunting was much less common around him at Fursdon in 1886 than it had been in the previous year, owing to a severe intervening winter. It is marked as occurring at Rousdon.

Snow-Bunting (p. 77).—Has been obtained at Rousdon. Mr. E. A. S. Elliot shot an adult male in a turnip-field close to Bolt Head on 9th October, 1891.

Rose-coloured Pastor (p. 81).—This bird, according to Mr. Mansel-Pleydell, is an irregular autumnal visitor to Dorsetshire, where the specimens obtained are mostly in immature plumage.

[**Red-winged Starling** (*Agelæus phœniceus* (Linn.)).—This well-known American bird has occurred about a dozen times in the United Kingdom, and has been said to have been obtained in North Devon, but we have never seen any specimen from the county. However, one was certainly captured at the Nash Lighthouse on the opposite side of the Bristol Channel on 27th October, 1886, at 3 A.M. One was also shot at Swanpool, near Falmouth, in August 1881 (Zool. 1881, p. 384.)]

Jay (p. 86).—In April 1853 we saw a Jay struck down by a Sparrow-Hawk, but it recovered and escaped.

Magpie (p. 87).—We observed a pair of Magpies nesting at Exmouth as early in the year as February in 1890. The late Mr. F. W. L. Ross, of Topsham, possessed a very tame Magpie for many years which he kept in his garden. Somehow or other it managed to break off its lower mandible close to the head, and Mr. Ross, having carefully modelled a substitute out of very hard wood, riveted it on to the stump with brass wire. The Magpie seemed none the worse for the operation, and not in the least incommoded, but ate and talked as well as ever, and when we saw it in March 1853, appeared in perfect health. The artificial mandible was so well made that it could hardly be detected.

Rook (p. 93).—Everyone who has lived near a Rookery must be acquainted with the fact that in the night, when the moon is bright, the Rooks are liable to sudden panics, dashing off from the trees with piercing shrieks very detrimental to sleep. We attribute these alarms to Owls passing near the Rookery; a Hawk flying past in the daytime produces similar commotion.

Raven (p. 96).—Lord Portsmouth has kindly informed us that Ravens used to build in some old oaks in the Deer Park at Eggesford until within a few years. We learn from Mr. O. Greig that a pair of Ravens came to the neighbourhood of Holsworthy in the autumn of 1891; he had also seen Ravens at Budo and Morwenstowe.

Shore-Lark (p. 104).—We have omitted to record two Shore-Larks that were shot in the parish of St. Merry'n, not far from Padstow

(see Zool. 1879, p. 489). Three have been obtained in the county of Dorset.

Great Spotted Woodpecker (p. 111).—"Heard some young birds making a noise in Saltram Wood in a hollow oak, and saw a Great Spotted Woodpecker near, so discovered the noise proceeded from a brood of the species (14th June, 1860). The Great Spotted Woodpecker visited Fursdon this season; one or two have been noticed for a week past or more, attracted very possibly by the wild cherries now about here (15th July, 1886)." (T. R. A. B.)

Wryneck (p. 114).—Mr. Mansel-Pleydell states that the Wryneck is well known in Dorset as a summer migrant, but we should doubt its being numerous in the extreme west of that county. In Cornwall, according to Mr. Rodd, it is only seen rarely in the autumn, and in the neighbourhood of the coast.

Roller (p. 117).—To the West Country Rollers we can add an example that was shot near Dorchester in 1868, the only Dorsetshire specimen known to Mr. Mansel-Pleydell. In addition to the four recorded by Mr. Rodd is another shot at Palmouth in October 1842, that was described by Dr. Bullmore in his 'Cornish Fauna.'

Bee-eater (p. 118).—Mr. Mansel-Pleydell states that the Bee-eater shot at Chideock is now in the Bridport Museum.

Cuckoo (p. 121).—This bird very frequently lays its eggs in the nest of the Robin, and according to observations made by Mr. Henry Nicholls it would appear probable that it sometimes selects that of the Swallow. (Zool. 1869, p. 1866.)

"A Titlark flew up from a nest on Crownhill Down, in which I discovered a very recently hatched young Cuckoo perfectly bare of feathers, and on the edge of the nest a Titlark quite as young which the Cuckoo had no doubt turned out of it. I replaced it in the nest, and the Cuckoo soon began to endeavour to again eject it. By means of the tips of its wings and its claws, which it stuck into the materials of the nest, it lifted it up to the brim, but did not succeed in getting it out whilst I watched it, as the branches of ling and coarse grass growing outside the part of the nest whither it brought its burthen prevented its falling over. The only place where it seemed possible for it to effect its purpose was that where I found it at first, on account of the impediments the ling and grass presented all around the other portion of the nest. Its back was remarkably flat, and the tips of its wings had a remarkable curvature that enabled it to use them as if they had been claws in elevating its burthen." (T. R. A. B.)

Snowy Owl (p. 134).—Mr. Mansel-Pleydell states that a Snowy Owl shot at Langston Copse in Dorsetshire (he mentions no date) is in Mr. Farquharson's collection.

Little Owl (p. 137).—Mr. Rodd mentions one obtained near Helston in Cornwall many years ago.

[**Scops Owl** (*Scops giu* (Scopoli)).—A single example of this tiny eared Owl was recorded by Mr. W. Thompson as having been killed many years ago at Buckland Ripers in Dorsetshire (Mansel-Pleydell, B. of Dorset, p. 15). Two are also included among very rare stragglers to Cornwall: "one, captured at Scilly, in April 1847, has been figured by Mr. Gould in his beautiful folio work 'The Birds of Great Britain.'" Mr. Rodd also mentions another from Trevethoc, near Hayle, obtained in January 1871.]

Montagu's Harrier (p. 143).—The Rev. W. Willimott has informed us that during the time he resided in Cornwall he had several nests of this Harrier brought to him from the Goonhilly Downs, where the birds were not rare. Mr. Henry Nicholls received an adult male from Goodrington, which had a slow-worm in its crop. In addition to the numerous Devonshire specimens of Montagu's Harrier which we have recorded, we may mention a pair of adults in Mr. Elliot's fine collection.

Buzzard (p. 145).—"Satisfactory evidence of the existence of *Buteo vulgaris* in the Pleistocene of Devonshire is afforded by three specimens in the British Museum from Brixham cave, near Torquay. One of these specimens is an imperfect sacrum and pelvis, which exhibits the sudden deflection of the hinder part of the ilia so characteristic of the Accipitres." (Mr. R. Lydekker, 'Ibis,' 1891, p. 387.)

White-tailed Eagle (p. 150).—Mr. J. C. Williams, of Caerhays Castle, St. Austell, saw an Eagle at the end of December 1891, which several times approached within twenty yards of him. From his familiarity with the bird in Scotland, he believed that he recognized it to be a Golden Eagle, but it was more probably a specimen of the White-tailed Eagle. For information of this interesting occurrence we are indebted to the Rev. W. Willimott.

Mr. O. Greig has informed us that he saw two Eagles near Morwenstowe, in N. Cornwall, not long since.

Kite (p. 155).—A male in fine plumage was shot by the keeper at Clowance, near Camborne, in Cornwall, the seat of the Rev. St. Aubyn St. Aubyn, in the spring of 1882. This bird had been seen at several places in the neighbourhood previously. (T. Cornish, Zool. 1882, p. 190.)

Honey-Buzzard (p. 157).—Mr. Mansel-Pleydell states that this bird goes by the name of the "Capped Buzzard" in Dorsetshire, where it is an occasional summer migrant. Mr. G. B. Corbin, of Ringwood, described a fine female which had been killed early in June 1887 at Wimborne (Zool. 1887, p. 350) that had its feet covered with cowdung in which it had evidently been scratching for grubs. In its gizzard were the remains of Cockchafer, Earwigs, and of the larvæ of the common "Gamma" moth.

Merlin (p. 165).—Mr. James Rowe, of Barnstaple, has received seven or eight at different dates.

Red-footed Falcon (p. 167).—In addition to the two Cornish specimens we have mentioned Mr. Rodd states ('B. of Cornwall,' p. 307) that Mr. W. B. Cocks, of Falmouth, a very good observer, *saw* one at Budock, near that port, which rose out of furze within three yards of him, in May 1851.

Cormorant (p. 174).—Mr. James Rowe, of Barnstaple, once took a 2-lb. Salmon Peal from the stomach of one of these birds.

Gannet (p. 177).—A young Gannet was captured by a fisherman, whilst fast asleep, on the banks of the Avon in October 1891 (A. H. Palmer).

Heron (p. 182).—Mr. James Rowe, of Barnstaple, has informed us that he once received an old Heron which had the breast-feathers reaching below the knees, while the feathers of the crest were over a foot in length!

Besides the Somerset Heronries we have mentioned there are two others: one at Halswell, near Bridgwater (Mr. C. Kemeys-Tynte), where Mr. Cecil Smith ascertained that there were about fifty nests in trees in the park in 1883; and another in the woods at Brockley, near Bristol (Mr. Cecil Smyth-Pigott).

Purple Heron (p. 183).—We have omitted to mention a female Purple Heron in the Rev. W. S. Hore's collection which he obtained from Pincombe, of Plymouth, "and closely inspected the body immediately after the bird was skinned." (W. S. H., *in litt.*)

Bittern (p. 191).—We regret to state that three Bitterns were killed at Slapton Ley in January 1892. Mr. W. V. Toll had seen two of them within fifteen feet of him a short time previously, and had left them unmolested.

Grey Lag Goose (p. 205).—"On 25th October, 1889, I winged a male Grey Lag Goose. It was caught the next day by a visitor at the Sands Hotel called Pierce, of Clifton. I wrote to him, and he had the bird preserved—a very good specimen." (Walter V. Toll, *in litt.*)

Wigeon (p. 221).—On the 6th of August, 1891, Mr. W. V. Toll, when shooting with Mr. Lucas, killed three "Yellow-polls" (adult Common Wigeon) on Slapton Ley.

Common Teal (p. 228).—According to Mr. W. V. Toll, *numbers of Teal* breed on Slapton Ley.

Shoveller (p. 230).—A young Shoveller was shot on Slapton Ley on 6th August, 1891, by Mr. W. V. Toll when in company with Mr. Lucas.

Pheasant (p. 262).—In September 1625, at two banquets provided on the occasion of a visit from Charles I. to Plymouth, amongst other

birds there were seven Pheasants at the first and five at the second. (Trans. Devon. Assoc. vol. x. p. 255.) Pheasants have been turned down on the Scilly Isles, where they do well, but, according to Mr. T. Cornish, never attain to any large size.

Corn-Crake (p. 280).—Mr. William Leir shot one of these birds at Combe Head, Bampton, on 12th January, 1892. ('Field,' 16th Jan., 1892.)

Coot (p. 284).—Mr. Walter V. Toll, speaking of Slapton Ley, says:—"A fairly large number of Coots breed here, but not a great many in the Ley proper. As the breeding-season draws near the Coots that do not migrate come up to our [the Strete] portion of the Ley and nest, quite twenty to one to what they do at the other end of the Ley. No doubt a large number come to the Ley, sometimes late, sometimes early: last year (1891) late—middle of December; and the late cold weather brought in a lot more" (*in litt.* Jan. 17th, 1892).

Great Bustard (p. 290).—Mr. Gatecombe had an opportunity of examining the Bustard killed in the parish of Bratton Clovelly on December 31st, 1851. It proved to be a *female*, and the stomach contained a large quantity of turnip-leaves mixed with several flat flinty stones about the size of a sixpence. The bases of the feathers on the breast and back were of a beautiful rose colour.

* * We presume the *sex* was ascertained by dissection. When we saw this fine specimen we judged it, from its size, to be a male bird (M. A. M.).

Little Bustard (p. 293).—In his 'Gleanings of Natural History,' vol. iv. (London, 1758), Mr. George Edwards gives a coloured plate of a Little Bustard which was sent up from Cornwall, and exhibited before a meeting of the Royal Society in London in 1751, when no one present was able to say what it was, and it was accordingly forwarded to him for his opinion upon it. (*Vide* 'Transactions R. S.' for 1754.)

Ivory Gull (p. 371).—Having recently had an opportunity of examining a number of skins of this rare species which were obtained at Jan Mayen in March 1891 we noticed that the adults varied greatly in size, some being at least two inches longer than others. Our friend Mr. J. Gatecombe has recorded how greatly some other Gulls (Herring, Iceland, &c.) differed in size, so that it is interesting to be able to add the Ivory Gull to the list. The Torquay specimen is nearly adult.

Kittiwake (p. 371).—Mr. G. F. Mathew, R.N., has informed us that when he was on a voyage to Halifax in November 1891 on board H.M.S. 'Tyne' he noticed Kittiwakes *every day* all the way across the Atlantic, and that these Gulls were also plentiful in Halifax harbour. On nearing the coast the Kittiwakes were joined by Black-

backed, Herring-, and Glaucous Gulls, while Little Auks, Fulmars, Guillemots, &c. were in hundreds (G. F. M., *in litt.* Dec. 19th, 1891).

Sabine's Gull (p. 387).—Mr. T. Cooper, taxidermist, of Poole, Dorset, forwarded a list of rare birds that had recently been obtained in Poole Harbour to 'Land and Water' for March 19th, 1892. In it is included a Sabine's Gull, but the state of plumage and the date of capture are not mentioned, and we suppose that it occurred at the same period when several other examples of this species were secured on the S.W. coasts, viz. after the heavy October gales in 1891.

Buffon's Skua (p. 397).—Mr. T. Cooper also reports two Buffon's Skuas from Poole Harbour, probably shot in October 1891, when these birds visited other parts of the S.W. coasts.

Great Northern Diver (p. 410).—The Divers are extremely inquisitive. Mr. J. Tarratt has informed us that in the far north of Norway a lure of red cloth displayed upon the shore would often be successful in attracting the Great Northern Divers to swim within range of a gunner posted in ambush. In *Zool. for 1876*, p. 4785, Mr. J. Gatecombe records that on Dec. 19th, 1875, there were three of these birds off Firestone Bay, "two of which would turn almost completely over on their backs, with one leg in the air, during the act of preening the feathers of the breast; they had also a singular habit, whilst swimming, of thrusting out one leg from behind, which they waved high above the water, like a fan."

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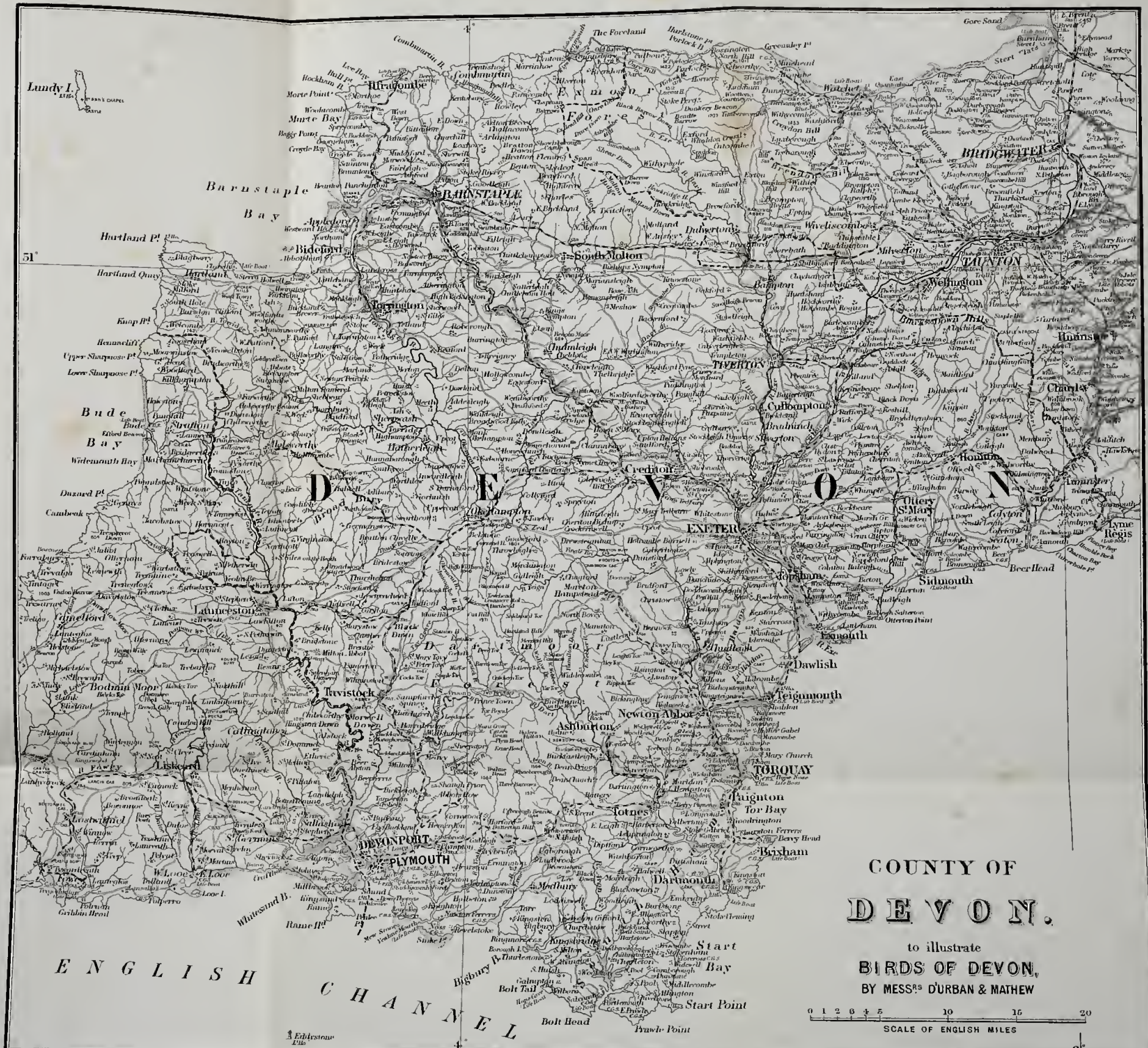
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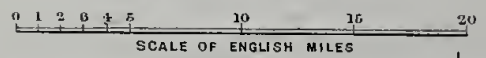




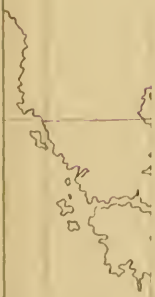


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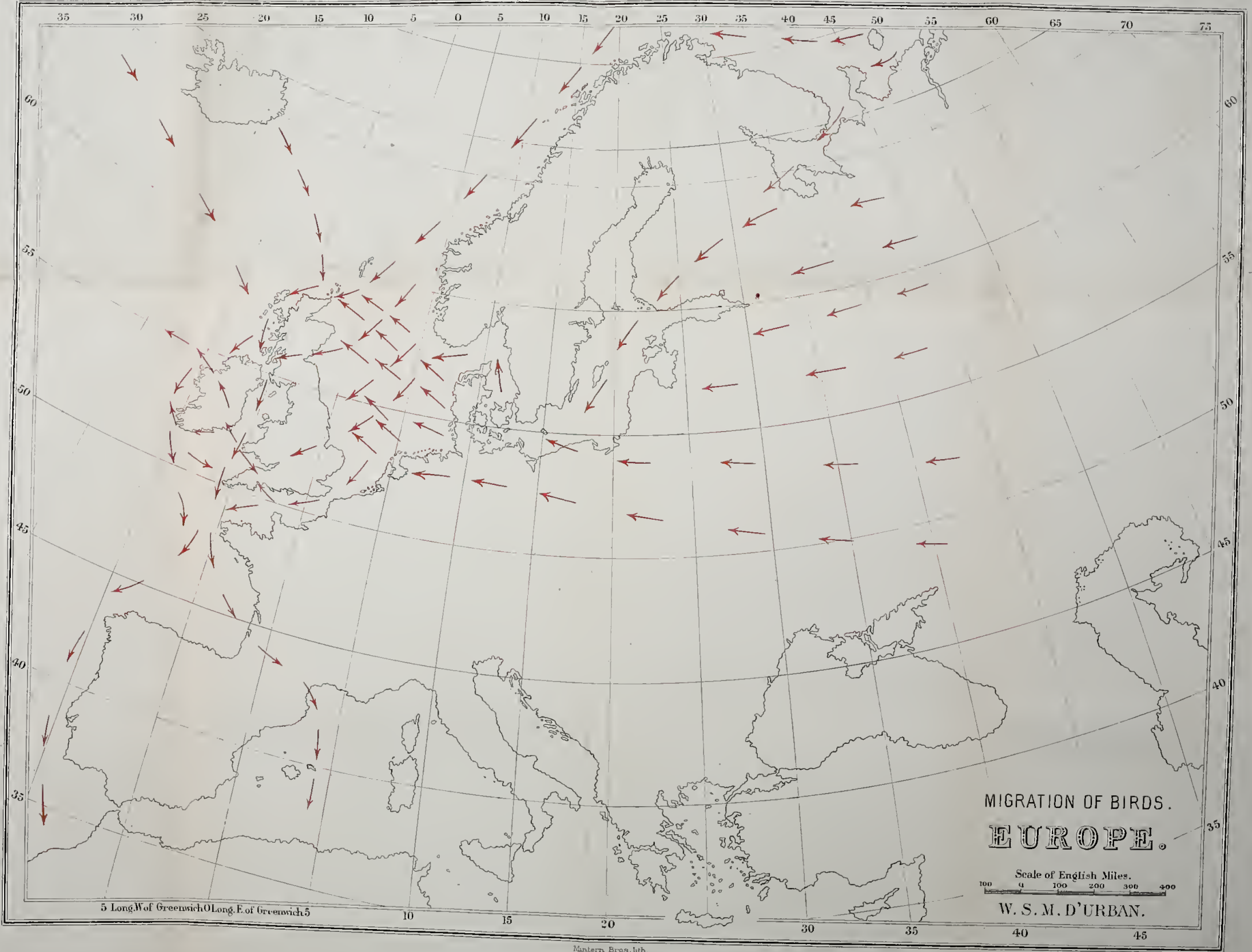
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BIRDS OF DEVON,
BY MESSRS O'URBAN & MATHEW







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Scale of English Miles.
0 100 200 300 400

W. S. M. D'URBAN.

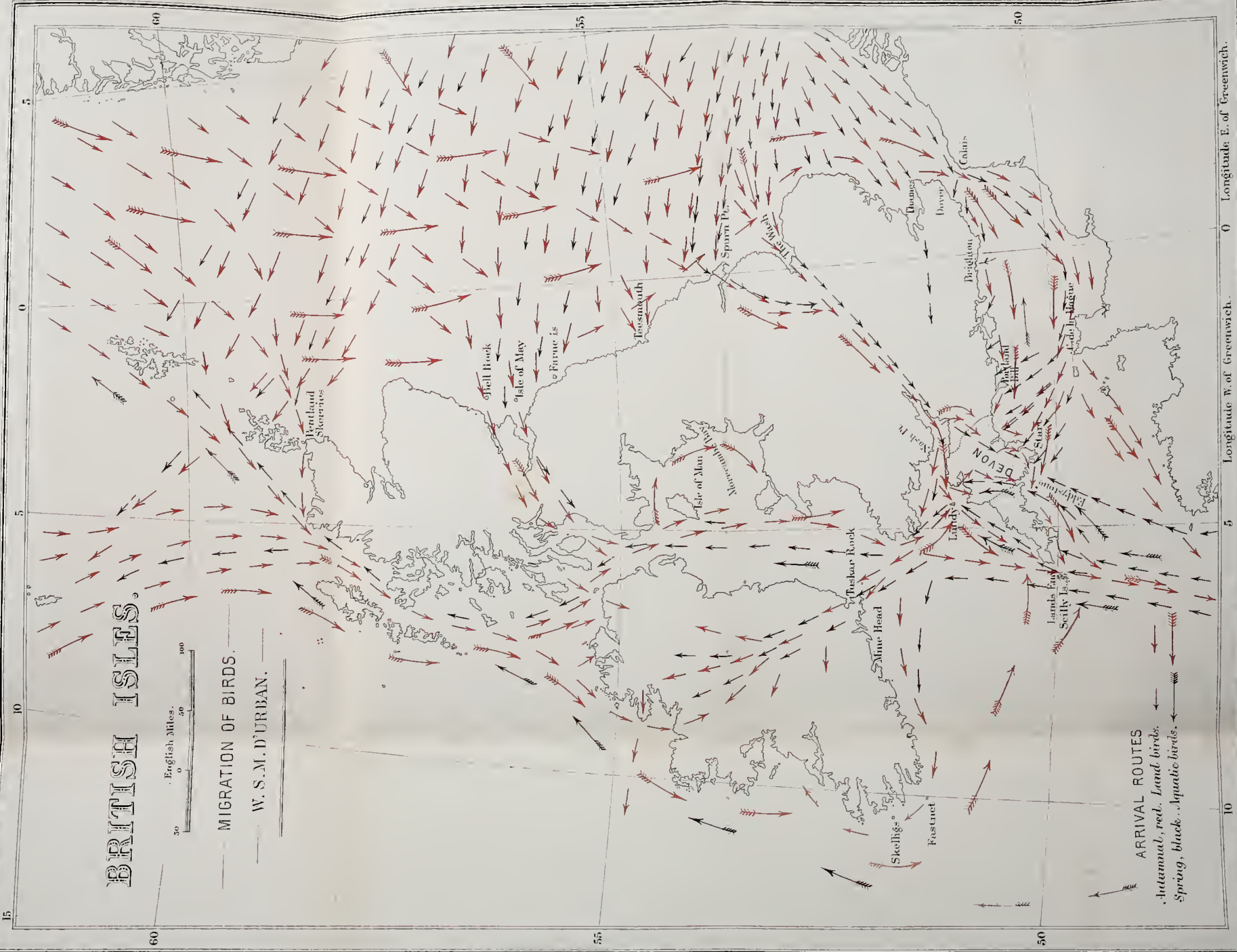
5 Long. W. of Greenwich 0 Long. E. of Greenwich 5



BRITISH ISLES.

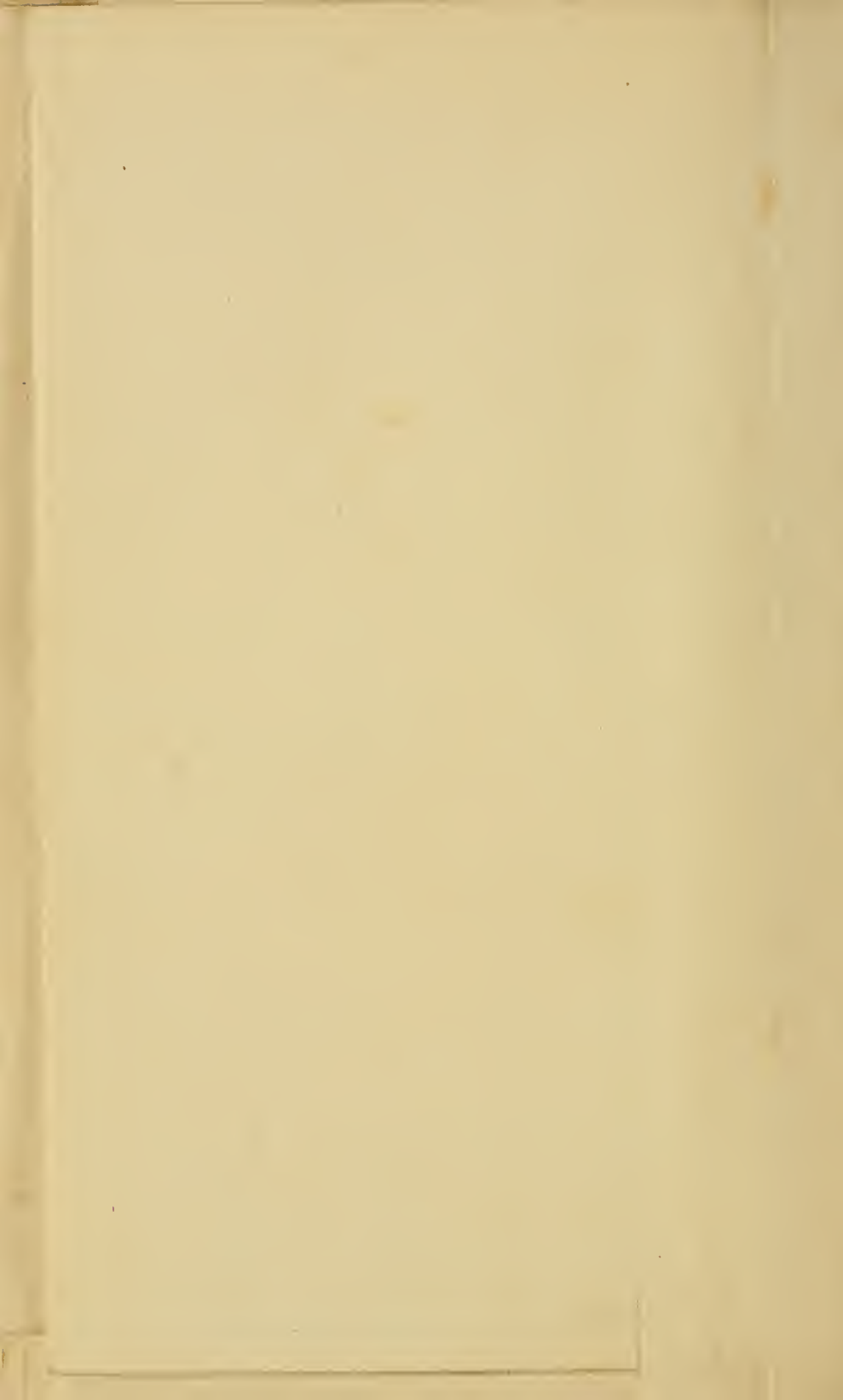


MIGRATION OF BIRDS.
W. S. M. D'URBAN.



ARRIVAL ROUTES.
Autumnal, red. Land birds. —
Spring, black. Aquatic birds. —

15 10 5 0 5 10 Longitude W. of Greenwich. Longitude E. of Greenwich.



my

VCH





