EGGS OF BRITISH BIRDS,
WITH AN ACCOUNT OF THEIR BREEDING-HABITS.

LIMICOLÆ.

WITH 54 COLOURED PLATES.

BY
FRANK POYNTING.

LONDON:
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AUTHOR'S NOTE.

In order to justify the appearance of another work on British Oology, I may say that it is intended as an instalment towards supplying a want felt, I believe, by many naturalists. In existing works, however excellent, on British Oology, the figures of eggs assigned to each species are, as a whole, insufficient to show the range of variation. There are several excellent works on European or General Oology, giving a much larger range of varieties, but in these, and in the earlier British works, the eggs of many species, unknown or unobtainable at the time of publication, are not figured at all. Not having found any work embracing British Oology which complied with the demands of naturalists in this matter of varieties, I have attempted to supply the deficiency in the present work, so far as regards the species it deals with. With the advantage of the great improvements now made in chromo-lithography I have endeavoured to supply accurately coloured figures of the eggs of the British Limicoleæ, in sufficient variety, where possible, to enable the naturalist to form a good idea of what the eggs of each species are really like.

I have endeavoured, as far as possible, to quote authorities who write from personal observation. By this means the text becomes, to a large extent, a record of birds'-nesting adventures, and will, I think, be more readable and trustworthy than if I had supplied a condensed account of the breeding-habits of the various species. In this connection I hereby acknowledge my great indebtedness to the various authors whose works and articles I have so freely laid under contribution.

In the preparation of my plates I am much indebted to Mr. Herbert Massey, who has not only freely entrusted me with so many specimens from his splendid collection, but has also been at great trouble in selecting, packing, and sending
me the eggs from time to time, and in supplying me with the history of each specimen. For the loan of various valuable eggs I also owe hearty thanks to Messrs. E. Bidwell, R. W. Chase, H. E. Dresser, H. J. Pearson, J. H. Salter, and Dr. R. Williams. Mr. Dresser has, moreover, looked over some of the proofs and given me valuable advice and information, and Mr. Bidwell has kindly examined my drawings from time to time and advised me thereon. I have further to thank the following gentlemen for the offer of loans of specimens in the event of my extending the present work:—Messrs. J. Backhouse, B. Crabtree, P. Crowley, H. S. Davenport, H. E. Dresser, J. A. Harvie-Brown, Dr. H. Bendelack Hewetson, H. Massey, W. Newhall, F. W. Pape, H. J. Pearson, H. L. Popham, W. Mark Pybus, and F. B. Whitlock.

To Prof. M. Menzbier, Mr. H. S. Davenport, and Mr. H. Leyborne Popham, I am indebted for valuable articles and notes supplied to me for this work.

Lastly, I have to express my thanks to Dr. G. Brown Goode and Capt. C. Bendire for permitting drawings to be made of rare eggs in the U.S. National Museum Collection; to the latter gentleman for selecting the specimens and for valuable information; to Dr. R. Bowdler Sharpe and Mr. W. R. Ogilvie-Grant for courteous assistance in viewing the Study Collection of eggs in the British Museum; and to the firm of Mr. W. Greve for their wonderful reproductions of the original drawings.

In this work I have, with few exceptions, adopted the scientific arrangement and nomenclature used by Mr. Howard Saunders in his 'Manual of British Birds.' I have given the geographical distribution of those species only which do not breed within the British Islands.

F. P.

Worsley, Manchester.
May 1896.
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EGGS OF BRITISH BIRDS.

LIMICOLÆ.
(PLOVERS, SNIPES, SANDPIPERS, &c.).

BY
FRANK POYNTING.

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Price £1. 5s. net.
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DOTTEREL.
Eudromias morinellus (Linnæus).

F. Poynting del.

Litho Wilhelm Graew Fenna.
**DOTTEREL.**

**EUDROMIAS MORINELLUS (Linnæus).**

**Explanation of Plate.**

Figure 1. Lapland; H. W. Wheelwright coll. In collection of H. Massey, Esq.

2. Ditto.

3. Ditto.


5. Ditto.


8. Tornea Lappmark, June 10, 1891.

The Dotterel is chiefly known as a spring and autumn migrant, a few pairs remaining to breed in the English Lake District and in certain parts of Scotland. It is rare in Ireland.

Mr. Frank Nicholson, who has had an unequalled acquaintance with the nesting habits of the Dotterel in the English Lake District, communicated his experiences to Messrs. Macpherson and Duckworth for their ‘Birds of Cumberland.’ The following is an extract from Mr. Nicholson’s narrative *:

> “It is doubtful if the Dotterel ever bred freely on the mountains of Cumberland and Westmorland, at least during the last hundred years. From the evidence of shepherds and men whose memory extends back to early in the century, it would seem that the Dotterel was never very numerous as a breeding species, but that it appeared very regularly each season, about the middle of May, in small flocks or trips of twelve or fourteen birds in each, on the tops of the highest mountains, where it spent a few days before pairing off and dispersing over the neighbouring hills for nesting purposes. During the last thirty years, judging from my own observations, the species seems to have been gradually disappearing from the district, until in this year (1885), I only saw three pairs

---

during several days spent in visiting all the most likely ground. It is not quite
clear why the Dotterel should be leaving the district, for it has apparently few
enemies now, whilst formerly, when it was more numerous, it had many. Years
ago it was quite the custom amongst the miners to have a day’s Dotterel shooting,
and through the shepherds or the miners seeing them when going to their work, it
soon got abroad when the Dotterel had arrived in spring, and every fellow who
could procure the loan of a gun would have a day ‘mangt Dotterel,’ whilst they
were as tame as barn-door fowls, and before they had distributed themselves
over the fells. But now, through the mines being mostly closed, the gun tax,
the extermination of vermin, and anglers using feathers for artificial flies that are
but little inferior to those of the Dotterel, and more easily procured, one can
hardly understand their scarcity.

"Mr. Heysham’s paper in the ‘Magazine of Natural History’ for 1838 has
become a classic, and been quoted in extenso by nearly every writer on British
birds since; but it is rather misleading, as the late James Cooper, curator of the
Warrington Museum, wrote in the ‘Zoologist,’ 1861, and cannot be taken as a guide
to those who intend to look for the eggs, for nest there is none: ‘The birds do not
select the summits of the highest mountains, nor do they lay their eggs where the
fringe moss grows, but in a depression upon short dense grass, a little below the
summit.’ This, I may say, is correct, and quite tallies with my own observations,
for I have generally found Dotterel frequenting the upper slopes of the highest
mountains, and the summits of the spurs of the highest mountains, but not the
summits of the highest mountains. The Dotterel only lays three eggs. When
disturbed, the Dotterel usually runs off its eggs to a little distance, and is mute;
but occasionally, if the eggs are hard sat, it will flutter off its nest as if wounded,
and remain calling within about twenty yards, uttering a note which is somewhat
like that of the Golden Plover, but much lower. After the young are hatched, the
parent birds behave quite differently, and exhibit great anxiety for their safety.
All the eggs I have taken I took in June, but that they sometimes lay at the end
of May, and even in July, is evident, as I have found eggs hard sat the first week
in June, and seen young ones then. On several occasions I have come across
young in July. James Cooper, who is alluded to above, was employed as a
collector by Mr. Heysham, and was the ‘able assistant’ spoken of by him in his
account of the Dotterel. Cooper was a remarkable man and deserves a passing
notice. He it was who really discovered the first eggs of the Dotterel on Whiteside.
He was a man who seemed capable of enduring any amount of fatigue. On the 28th of June, 1835, he walked from Carlisle to Whiteside, a distance of
between thirty and forty miles, where he arrived late in the afternoon. He had
not been long on the mountain, before he observed a pair of Dotterel. He searched for the eggs without success till darkness came on, when he determined to stay out on the mountain all night and renew his search at daybreak, which he did, and was rewarded by finding the eggs. He then walked back to Carlisle, never having been in bed since leaving there the previous day."

Mr. J. H. Salter, who found the Dotterel breeding in the English Lake District as recently as last year (1894), has published the following interesting account of his discovery:

"During a recent visit to the Lake District, I made inquiries about the Dotterel, Eudromias morinellus. Shepherds and anglers could mention former haunts, and tell of the value set upon this bird by makers of trout-flies; but the impression seemed to be that few or none remain to breed at the present day. After some search I met with a solitary bird of this species, on July 19th, upon the bare summit of one of the mountains, at a height of about 2740 feet above sea-level. It rose with a weak note, somewhat like that of the Ringed Plover, Aërialitis hiaticula. I found its mate near the same spot, which they were unwilling to leave, one or other of the birds being almost always in sight. The ground was covered with sub-alpine mosses, dark in colour, and woolly in texture, with here and there a patch of reddish shade. The hen bird, which seemed most interested in my movements, watched me from a distance of about twenty paces, or took rapid runs of a few yards, stopping now and then to pick up some insect or other food. When running, the neck was drawn in, and head not higher than its shoulders. It was perfectly silent, and harmonised well in colour with the stones: I noticed an occasional jerking movement of the head, which may have given rise to the old idea of the Dotterel imitating the movements of the fowler. After watching for half an hour, in a bitterly cold wind, I formed some idea of the whereabouts of the nest. As I drew nearer, the bird shuffled along the ground, squeaking like a rabbit; her white-tipped tail was spread to a perfect fan, wings a little raised, and shivering. It was not until I had watched for some time longer that I at length found two eggs in a slight hollow in the moss. There was no nesting material of any kind. Next day, on visiting the place, I found the bird sitting. After watching her from a distance of four paces, I slowly lessened the distance, and finally stooped and touched her before she slipped off the nest. I thought this tameness of the sitting bird the more noteworthy, as the eggs were not more than half incubated. I came across a second pair on a neighbouring summit, but could see little of them owing to the thick

* 'Zoologist,' 1894, pp. 343, 344.
mist which prevailed. Both birds were much excited; they shammed lameness, sometimes springing a few feet into the air, and fluttering down again, as well as going through a performance similar to above described. They doubtless had young, and must have led them away shortly afterwards, for on two subsequent occasions I could find no trace of either old or young. I looked over much suitable ground in other directions, including spots which were formerly favourite haunts, but could see nothing more of this most interesting species."

By the kindness of Mr. Salter, I am enabled to figure the two eggs above referred to (Figures 4 & 5). He further informs me that it was the male bird which sat on the eggs and shammed lameness, the female hardly ever coming near the spot.

Mr. J. A. Harvie-Brown has given the following interesting account of an excursion in search of the eggs of the Dotterel in 1873 *:—

"Some years ago my friend Captain H. W. Feilden and myself obtained the kind permission of the lessee of a shooting, in a certain wild district of Scotland, to obtain the eggs of the Dotterel (Charadrius morinellus), which rare species was known to breed upon a mountain on the property. The gamekeeper, however, during three successive seasons, failed to obtain them for us, and assured us that none had frequented their accustomed haunts during these years; further, that a young English gentleman, who was shooting there, had killed in one day the two old birds and the three young; and that, since that time, none had been seen upon the mountain, though, upon an adjoining property, two pairs had bred undisturbed the year previous to our visit.

"It was, therefore, with but the very faintest expectations of success that Captain Feilden and myself, accompanied by the gamekeeper, started to ascend the mountain on the morning of the 16th June of the present year (1873). Indeed, we already consoled ourselves with the thought that we would, at all events, see the ground which was known at one time to have been occupied by this now rare British bird, and have a good walk and a view from the top. We reached the top of the mountain, some 3000 feet above the sea, at nine o'clock A.M., and found a broad, almost level, moss-covered plateau stretching before us to a distance of about three-quarters of a mile. Scattered over this level mossy ground were numberless small pieces of grey rock, partially embedded in the yielding moss, and the moss itself rose in ridges or hummocks, giving an irregular outline to the surface, or, as it were, forming the latter into innumerable miniature hills and valleys.

DOTTEREL.

We at once saw how admirably suited to the habits of the species we were in search of, this kind of ground was, and, moreover, that we would have no little difficulty to contend with, in the event of our having to watch the bird to the nest, as the upper plumage of the Dotterel harmonizes in colour with the yellowish-brown carpeting of moss. First, however, we had to find the birds; and, accordingly, with this object in view, we slowly walked over the deep yielding moss, towards the far, or west end of the ridge.

"About half-past ten o'clock, as we were walking along in line, I first discovered a Dotterel, running swiftly, about twenty yards in front of the gamekeeper. It shortly afterwards rose and flew close past, and across our line of march, uttering a low, plaintive, plover-like call—once heard, not easily to be forgotten. Feilden and I agreed that it was the female bird, from the brightness of the chestnut coloring, which was distinctly visible as it passed us. We now marked the place where I had first seen it, by laying one small grey stone on the top of a larger, and after a short search for the other bird, in which we were not successful, we went away again to the east end of the range. After an hour or so we returned again to the west end, Feilden walking in the centre, and the keeper and myself on each side, lower down the hill and a little in advance. On arriving near the place, Feilden detected the female running a considerable way off in front of him, and I saw the male bird, which ran from the vicinity of the nest, or at least from where we supposed it to be, in a diametrically opposite direction from that chosen by the female. We now made sure that the eggs or young were not far distant; while, at the same time, we learned that we had two most cunning parents to circumvent. Far, indeed, were they from being the 'little fools' (morinelli), which Linnaeus named them.

"After a consultation, it was agreed to leave me to watch, whilst Feilden and the keeper again went off to a distance. Accordingly, I lay down, partially concealed by a hummocky piece of mossy ground, about fifty yards from the place whence Feilden had seen the female run. The keeper afterwards told me that I was absolutely invisible from a distance, the color of my clothes harmonizing admirably with that of the yellowish-brown moss. For an hour I remained almost, if not quite, immovable, and, at the end of that time, was rewarded by seeing the female run rapidly up over the crest of the nearest ridge. It became a difficult matter to watch her movements after she came down amongst the hummocky ground, all the more so, as she took advantage of every grey stone or inequality of the ground to dodge behind, and stooping low, with head pushed out in front, when she crossed the higher places, just as I have seen a Corncrake do when crossing open ground between two places of shelter. She must have
seen me, or suspected my presence, as she soon ran rapidly away in another direction, over the sky-line, and was lost to view. I waited again, and in about ten minutes she returned from the same direction in which she had last disappeared, and repeated the manoeuvres above described, also picking up flies, and endeavouring to put on an appearance of supreme indifference. As if not quite certain of my presence, she sometimes perched on the top of a mossy hummock and looked round, jerking up her head; but, finally, she again ran swiftly over the sky-line. From these movements I, somewhat too hastily, concluded that the nest must have been in that direction, and I accordingly left my place of concealment, and carefully stalked, on hands and knees, after her. I peeped over the crest just to see her take wing from the succeeding sky-line.

"Feilden and the keeper then joined me, and we searched carefully around, beating up every foot of a large square which we had first marked out. We found a false nest, which gave us hopes. Had the real nest been within that square, we feel convinced it could not have escaped us, and the sequel will show how closely we must have passed it. Once more we went to the east end of the range. Here, amongst some loose stones on the side of a hill, we found a Ptarmigan sitting on her nest. Feilden put down his hand, and the poor bird did not move off her eggs until his forefinger was within three inches of her bill. When at last she scuttled off, we found that she had been sitting hard on only three eggs.

"After an hour or so, Feilden started, this time alone, and we lay still. In about half an hour from the time he left us we heard him shout, and we sprang to our feet and ran. The keeper said, 'Can he have found it?' and I answered, as we ran, 'Not a doubt of it.' Sure enough, Feilden had the nest safely and surely marked with a red pocket-handkerchief, and had come away to meet us. As we now approached we again saw the bird run, this time directly off the nest. It was not fifteen yards from the side of the big square we had before so carefully searched. We sat down beside the nest and feasted our eyes upon the contents; and the poor bird, still exercising her cunning, ran round and round us, here and there picking at the flies, or pretending to do so, or watching us from a hummock of moss.

"There were the three eggs, lying in a shallow saucer-like depression in the deep moss, close to a small grey stone, behind which Feilden had seen her lie down. There was no lining to the nest whatever; it was simply a shallow hollow, pressed down (not scraped) by the bird, and the eggs lay points inwards.

"Feilden had seen the bird run from the nest, or from its vicinity, and had remained and watched. At my suggestion he had come up over the crest of the ridge instead of going down from the top. The bird came running from one direction, and then, as she had done when I watched, ran down the hill in
another. The second time, she came from a different direction, repeating the 
manceuvres I have endeavoured to describe; but the third time, Feilden marked 
er her sneak on to the nest, head down, and saw her gradually settle. He gave her 
five minutes, to make certain, and then walked straight for the little grey stone, 
keeping his eyes firmly fixed upon it. When he was within six feet of the bird 
she was still indistinguishable from the surrounding moss, and it was only when she 
was at last forced to rise that he discovered her. It was six o'clock when the nest 
was discovered, and seven o'clock when we left the mountain. Feilden carefully 
packed the eggs in his hat, which he carried in his hand, and I brought away a 
square of the moss containing the nest, having cut it carefully out with my knife.”

The late Mr. H. W. Wheelwright gives the following account of this species 
as observed by him in Lapland *:—“This is peculiarly a fell bird, and next to 
the Golden Plover . . . , which swarmed on all these fells, I think was one of 
the commonest birds on our fells, and it is found as well on the snow-covered 
tops as on the lower fells, but always among the stones, never on the fell 
meadows. They were by no means shy, especially in the breeding season, 
and their soft whistling call-note, ‘kirley-kirlez,’ often betrayed the locality of the 

nest, which is generally nothing more than a little dry grass in a hole scraped on 
the bare fell; but once, and once only, I took a nest made of fine dry grass and a 
few ptarmigan feathers. I never found more than three eggs in a nest, and, as I 
have taken these hard sat-on, I fancy three is the full number. We took our first 
nest on June 7, and our last on June 28; but by the middle of July many young 
were strong flyers. I know no egg which is likely to be mistaken for that of the 
Dotterel—ground colour dark stone, thickly blotched all over with black patches.”

In his account of a “Birds’ Nesting Ramble in Lapland” in the spring 
of 1884, Mr. A. C. Chapman writes †:—“After a long climb we eventually 
reached the summit of a truly characteristic Lapland fiel; nothing but 
a great rolling waste of reindeer-moss, thickly strewn with grey boulders 
and stones and occasional patches of snow. It seemed to be a real paradise 
for the wild and solitary Dotterel. On looking over a ridge, we saw a 
grey-looking bird get up and quickly disappear behind a knoll. On going 
to the place, there lay the ‘triple clutch’ characteristic of the Dotterel, laid 
in a slight hole scratched in the reindeer-moss, without any lining. Leaving 
Trinus at the nest, I went after the bird, which kept running in front of me, and 
everually rose, uttering a deep croak-croak, which I never heard afterwards. 
After a considerable chase I procured her, and returned to the nest. The eggs

† 'Ibis,' 1885, pp. 178, 179.
were hard-sat. . . . Once I watched a Dotterel running about, till at length it sat down, and I felt sure it was on the nest. Approaching quietly, I got within six feet of her, when I perceived that the bird had gone to roost; her eyes were shut, and she was fast asleep: it was a very pretty sight. On looking at my watch I found it was midnight."

Messrs. H. J. Pearson and E. Bidwell met with this species in Norway in 1893. They write*:—"We found a nest on June 22nd with three eggs, very distinctly marked, on the summit of a high fell in the Porsanger, and shot the female from the nest. It was placed between two patches of reindeer moss, a piece of Empetrum nigrum, and dwarf birch (about 1½ in. high), and was lined with dead birch-leaves. We afterwards saw two more birds; but a thick fog coming on we were obliged to give over our search for their nest."

Mr. H. Seebolm describes the eggs of this species as follows†:—"The eggs of the Dotterel vary in ground-colour from greyish buff to ochraceous buff, with sometimes the faintest possible tinge of olive, and are blotched and spotted with rich dark brown and with underlying markings of inky grey. The surface-markings are generally large, concealing a large portion of the ground-colour, and are often confluent, especially on the larger end of the egg. Some eggs have the spots much larger than others, but on most of them they are pretty evenly distributed over the entire surface. The underlying spots are small and remarkably few in number. The eggs vary considerably in shape, some being almost as pointed at the large end as at the small, whilst others are pear-shaped; they vary in length from 1·75 to 1·5 inch, and in breadth from 1·17 to 1·1 inch. The only eggs of a British bird at all likely to be confused with those of the Dotterel are certain varieties of those of the Arctic Tern, some of which are almost indistinguishable from those of the Dotterel, but the latter have fewer and smaller underlying markings."

Mr. H. E. Dresser states that the measurements of a tolerably large series of eggs of this species in his collection, obtained in Norway and Lapland, vary from 1·6 by 1·12 inch to 1·52 by 1·05 inch. Mr. Dresser further states that he has been informed by Mr. Meves that out of over fifty clutches of eggs of the Dotterel which have passed through his hands, he has never known a clutch to consist of more than three eggs; the largest eggs he has had measured from 1·77 to 1·81 inch by 1·14 inch, and the smallest 1·41 by 1·1 inch, and 1·49 by 1·06 inch.‡

* "On a Birds'-nesting Excursion to the North of Norway in 1893," 'Ibis,' 1894, p. 233.
† 'History of British Birds,' vol. iii. p. 33.
GOLDEN PLOVER.
CHARADRIUS PLUVIALIS, LINN.EUS.

EXPLANATION OF PLATE.

Figure 1. Northuravine, Shetland, June 5, 1891. In collection of H. Massey, Esq.
   2. Harray, Orkney, April 24, 1891. Ditto.
   8. Wasdale, Orkney, April 24, 1891. In collection of H. Massey, Esq.

This species is resident but partially migratory, and breeds in various parts of the British Islands, but is most plentiful on migration and during the winter.

Macgillivray writes *:—"The Golden Plover is generally distributed over Britain in the winter season, when it frequents the open plains and ploughed fields so long as the weather remains mild, but betakes itself to the sea-shore and its vicinity when there is frost. In many parts of Scotland, but especially in the Northern Highlands, and in the Hebrides, it is a very common bird. When the weather begins to improve towards the end of spring, the Plovers may be seen flying over the shores or the fields in their neighbourhood at a great height, in loose flocks, which now extend into a wide front, now form irregular angular lines, move with a quiet and regular flight, frequently emitting their peculiar soft notes, and at times uttering a singular cry, somewhat resembling the syllables courtie- wee. These flocks are leaving their winter haunts, and returning to the inland moors, over which they disperse in pairs.

"In the beginning of May, should you traverse one of the dreary heaths, you will often hear the plaintive cry of the Plover, mingling, perhaps, with the feeble

cheep of the Dunlin, or the loud scream of the Curlew. Before you have
advanced to any considerable distance, there may come up and alight on some
mossy knoll beside you, a male, clad in his beautiful summer vesture of black and
green. You may approach him within ten paces if you are inclined, and in some
districts it would be easy for one to shoot many dozens of them in a day at
this season. After incubation has commenced, the females seldom make their
appearance on such occasions. Whether the males assist their mates at that time
or not, they certainly do not forsake them. The nest is a slight hollow in a tuft
of moss, or on a dry place among the heath, irregularly strewed with fragments of
withered plants. The eggs, of which the full number is four, are placed, as usual
in this genus, with their small ends together. They are much larger and more
pointed than those of the Lapwing, being on an average two inches and one
twelfth in length, and an inch and five twelfths in their greatest transverse
diameter. The shell is thin and smooth, of a light greyish-yellow, or pale
greenish-yellow, or cream-colour, irregularly spotted, dotted, and patched with
dark brown, and sometimes having a few light purple spots interspersed, and
markings larger towards the broadest part. The young leave the nest immediately
after they burst the shell, and conceal themselves by lying flat on the ground. At
this period the female evinces the greatest anxiety for their safety, and will
occasionally feign lameness to entice the intruder to pursue her. I have several
times seen one fly off to a considerable distance, alight in a conspicuous place,
and tumble about as if in the agonies of death, her wings flapping as if they had
been fractured or dislocated. The eggs are delicious, and the young birds when
fledged not less so."

The late Dr. Saxby gives the following account of the breeding habits of this
species* :-“The Golden Plover breeds abundantly in every part of Shetland,
even on the small outlying holms. The breeding plumage begins to appear in
January, but for some weeks before it is completed—about the middle of March
—the birds pair, the males becoming very noisy and flying to a considerable
height. It is by no means unusual to meet with flocks long after pairs have
betaken themselves to their summer haunts, a circumstance which may possibly
be accounted for by the supposition that young birds breed latest; but, in point of
fact, eggs may be found in a fresh state from the end of April even to the
beginning of July. The nest is to be met with in almost every situation where
heather occurs, even upon the highest tops of the hills, but sunny slopes facing
the south or south-west are preferred. I have found more in slight hollows or

* 'Birds of Shetland,' pp. 159-161.
miniature valleys than elsewhere; but since in such instances the nest has been betrayed mostly by the bird flying off the eggs, it is probable that my success has been due to the ease with which, in these places, an approach can be made unperceived. The Golden Plover is by no means a close sitter, often flying or running from the nest when an intruder is fully a hundred yards distant. Owing to the shyness of the birds, and to the difficulty of observing them closely and constantly in their breeding haunts, facts bearing upon their habits in the summer season are not easy to gather. During the last eleven years I have scarcely been able to add anything to a note written in 1864:—'In Mr. Newman's useful little book, "Birds' Nesting" (p. 34), the materials of the nest are spoken of as "scarcely any,—a few fragments of heather and dried grasses carelessly scraped together;" and on referring to my note-books, I find that those very words might well have been applied to eleven out of the fifteen nests of this species (Golden Plover) therein described. Occasionally, however, and particularly during the first few weeks of the breeding season, the nest is constructed with more than ordinary care, and then consists of a deep saucer-shaped cavity, thickly and compactly lined with the above-mentioned materials, measuring between five and six inches across. It is almost invariably situated among moss or heather, sometimes by the side of a stone or upon some slight eminence, where there is sufficient growth to afford concealment.

"The only opportunity which has fallen to my lot of observing the length of time occupied by incubation occurred three years ago. About noon on the 7th of May I found four warm eggs, and on blowing one, ascertained that it was perfectly fresh. I afterwards visited the nest almost daily, and on the evening of the 23rd, observed that two of the remaining three eggs were already broken by the chicks. Next morning, on my approaching the nest, three young birds, mottled grey and yellow, ran out of the neighbouring heather; there was no appearance of broken shells in or near the nest. I have never known the male take any part in the task of incubation, although he is very attentive to his mate, and constantly supplies her with food while she is sitting; but both birds are so shy that, at such times, their habits can be witnessed only by means of long and patient watching from some good hiding-place, such as a large stone or the deep channel of a burn. While the female is sitting the male takes his station upon some eminence near the nest, giving warning by his loud peculiar whistle the moment an intruder appears.'

"Unlike the old birds, the unfledged young ones conceal themselves by sitting close to the ground among moss and heather, and are then most difficult to discover; when, however, they are compelled to attempt other means of escape,
they run and double in such a manner as to render the task of catching them one of no small difficulty.

"Although the colouring of the eggs varies considerably they can scarcely be mistaken for those of any other British species, except perhaps the Peewit, from which they may be known by their larger size and richer colouring. In 1863 I made the following observations upon the colouring of these eggs; and, on looking over a large series of notes in later journals, I see no reason to make any alteration in what was then stated:—'I have long observed, with no little perplexity, the remarkable variety of colour which occurs in the eggs of the Golden Plover, and the regularity with which each colour in its turn predominates according to the degree of advancement of the season. Every year I see large numbers of the eggs, and the general rule appears to be that those which are laid early in the season have a dingy hue, the ground-colour being strongly tinged with dull olive-green, and that a little later this begins gradually to become less frequent, giving place to creamy white, sometimes richly tinged with warm yellowish brown; the latter is deepest and most common in June and July, when the breeding season is drawing to its close. At this time also the spots and blotches are very abundant, and are more of a reddish brown colour.' Possibly the dingier and earlier eggs are those of older birds. The most beautiful variety is of a warm cream colour, with intensely deep brown blotches or spots, and with numerous rather large spots of light purplish grey. The usual size is about two inches in length by one inch and a half in breadth, but I have had one specimen measuring two inches and four lines by one inch and nine lines. The eggs are far superior in flavour to those of the Peewit."

Mr. T. E. Buckley, in his notes "On the Birds of the East of Sutherland," referring to the Golden Plover, says *:—'Not nearly such a common species as might be expected, but still fairly plentiful during the breeding season. Their nests are very difficult to find, as the male bird seems to be always on the watch, and his melancholy whistle soon brings his mate from the nest. On the two occasions on which I have taken their nests, the hens flew off and did not run, this being, I think, a commoner way amongst most of the waders of leaving their nests, than by running, though they often get up an immense distance off. The first nest I got was on the 11th of June, and the hen did not get off until I was close to her; the eggs being quite fresh. The other nest was on the 27th of April, and contained only three eggs; the hen rose at such a distance that I merely saw a flash of white as she showed the under part of her wing. I walked straight to

the place and found the nest. I have always observed that Curlews fly from their nests."

Referring to the last sentence, Mr. J. A. Harvie-Brown adds the following footnote:—"This, also, I have always noticed, but, in returning to the nest, they alight at a considerable distance and run to it, as, indeed, do many other species. Some waders, on the other hand, fly very close up to the nest, and then run quickly on to it. The more shy species appear to follow the first method, and the tamer species the latter, but no doubt in all cases something will depend upon the state of incubation of the eggs at the time."

Mr. Abel Chapman writes *:—"Golden Plovers seldom or never nest among covert—i.e. the nest is on the shortest grass or heather, often on perfectly bare ground. There is no attempt at concealment. On being approached, one Plover will rise straight from her eggs, a couple of hundred yards away; another slinks off, creeping away unseen through the heather; at other times, though more rarely, she will rise off her eggs at one's feet, even when fresh laid. The young run as soon as hatched, but are long in acquiring the power of flight, and retain the golden down on their necks when full-grown, as any grouse-shooter can see in August."

Mr. F. S. Mitchell, referring to the nesting of this species in Lancashire, writes †:—"The eggs are four in number, and are laid about the 1st of May, and a nest I found on Pendle Hill on the 10th May, 1879, consisted of a rather deep and neatly-rounded hollow, the bottom being covered with about half-a-handful of dry bents, and the position was a rather bare, grassy place, several yards from any heather, and with a good look-out over the neighbouring ground. The old bird flew away with just one whistle when she had got about twenty yards from the nest, and did not re-appear, though I heard her whistling in the distance for nearly half-an-hour, even then being very shy, and flying a long way off when I moved towards her."

Mr. Seebohm says the eggs of the Golden Plover "are pyriform in shape, and vary in length from 2·2 to 1·95 inch, and in breadth from 1·5 to 1·3 inch."‡

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† 'Birds of Lancashire,' p. 176.
‡ 'History of British Birds,' vol. iii. p. 37.
AMERICAN GOLDEN PLOVER.

Charadrius dominicus, Müller.
AMERICAN GOLDEN PLOVER.

CHARADRIIDÆ.

CHARADRIUS DOMINICUS, MÜLLER.

EXPLANATION OF PLATE.

Figure 1. Anderson River, British N. America, July 10, 1862; R. McFarlane coll. No. 7647 U.S. National Museum Collection.


There appear to have been only two occurrences of this American species in the British Islands, an example having been found in Leadenhall Market in 1882, and another being recorded as having occurred in Perthshire in 1883.

Referring to this species, Dr. Coues says*:—"The Golden Plover breeds only far northward, and is not ordinarily seen in the United States in the advanced breeding plumage above noted. It appears to have no special lines of migration, but passes over the country at large, sometimes in vast flocks, its autumnal progress being more leisurely than its advance in the spring. It reaches its breeding grounds late in May—the Barren Grounds of British America, and the coasts and islands of the Arctic Ocean. It is found throughout Alaska, according to Mr. Dall, and is common all along the Yukon. The same writer states that the nests are made in a hillock of grass, of the same material, and frequently a few feathers, the eggs being generally only two in number; this, however, is not the rule, the eggs being, as usual in this family, oftenest four in number. They are of the ordinary pyriform shape, pointed at one end and very obtuse at the other. The following measurements may indicate extremes of variation in shape—2.00 by 1.35; 1.80 by 1.40."

* 'Birds of the North-West,' p. 451.
With reference to the American Golden Plover, the late Dr. Brewer writes * :—"Mr. MacFarlane's Arctic Notes are very full in reference to the nesting and breeding habits of this species. The number of eggs was almost invariably four, but in one instance five were said to have been found. Out of one hundred and fourteen recorded nests, ninety-two contained four eggs. In one instance only one egg, nearly ready to hatch, was found. The nests were noticed throughout the Barren Grounds, from the time of the party's leaving the woods quite up to that of their arrival on the Arctic Ocean. The nests were in all instances mere depressions in the soil, generally lined with a few dry leaves, and were difficult to find, as there was nothing to distinguish them from the soil—which the eggs very closely resemble in color—and as the female glides from her nest, if approached, even when the intruders are still at a distance. She runs a certain distance, and if she succeeds in enticing the party away, will then take to flight. In a few instances, when the bird was surprised by a near approach before she left, she pretended lameness, and fluttered at their feet. The eggs were found in June, and some even as late as July, and quite fresh. When the ground was covered with newly-fallen snow the nests were more readily recognized. When approached the female usually left her position at a quick pace—between a run and a walk—and in no case was she known to fly up directly from her eggs. In one instance, where the presence of a nest was suspected, but the exact locality of which they were not able to discover, the party withdrew to a distance and watched, when the female, after resorting to various manœuvres to hide the place, at last revealed it by finally settling down upon her eggs. The eggs of this species have a ground of various shades of drab, differing in several specimens, and varying from a light greenish drab to a very deep shade, unmixed with any other color. Others have a ground of a pale rufous-drab. All are marked with blotches of a deep umber, approaching to blackness. These markings are smaller and more scattered around the pointed end; but are larger and become confluent, with intensified spots, around the obtuse apex. Their average length is about 1-91 inches, and their average breadth 1-31 inches. Their maximum length is 2 inches, their minimum 1-84; their breadth varies from 1-25 to 1-35 inches."

Mr. E. W. Nelson gives the following account of the breeding habits of this bird, which he met with during his stay in Alaska from 1877 to 1881 †:—"About

* 'Water Birds of North America,' vol. i. pp. 143, 144.
† 'Report upon Natural History Collections made in Alaska between the years 1877 and 1881, pp. 123, 124.
the middle of May this beautiful Plover reaches the vicinity of Saint Michaels. The earliest record I have, for the Territory, is May 13, specimens in my possession having been secured at Fort Reliance on the Upper Yukon at this date. As the breeding season approaches, it is found as one of the commonest breeding waders over the grass and moss grown country extending along the shore of Bering Sea. In some cases they have deposited their eggs by the 1st of June. . . .

"It arrives along the shore of Norton Sound, the last of May, in small flocks rarely exceeding thirty or forty birds. They are in full breeding dress, and are a beautiful sight as they glide about on easy wing, or feed over the marshy flats. Their soft, clear call-note gives evidence of the rich song to be heard later. They soon pair and disperse, so that within a few days after the main arrival their nests may be looked for. Their nests are generally in small depressions which may be found among the moss and dried grass of a small knoll, and at times a slight structure is made of dried grass. The grass, and, perhaps, a few dead leaves of the dwarf willow are arranged in a circular, saucer-shaped form, about 4 or 5 inches across, and contain four eggs, which have a pale yellowish ground-color, with very dark, well-defined umber-brown spots scattered rather profusely over the shell, especially about the larger end. One set of eggs measures 1·98 by 1·35; 2·09 by 1·30; 2 by 1·30; 2·08 by 1·33. This set of eggs was obtained at Stuart Island in June. Three odd specimens measure respectively 1·90 by 1·25; 1·92 by 1·38, and 1·86 by 1·29. A second set, obtained in June, 1880, near Saint Michaels, measures 2 by 1·31; 2·09 by 1·30; 2·09 by 1·26, and 2·02 by 1·29. The ground-color is very uniform, the only variation being to a slight buffy shade, in some instances, and a slight increase or decrease in the abundance of the dark markings. . . .

"The males are conspicuous objects, as they stand like silhouettes, their black and white breasts and sides of neck presenting a sharp clear-cut outline on the brown and gray background. At intervals their clear, mellow, and melancholy note rises for a moment, and then the bird apparently sinks into a day-dream and remains motionless for some time, until he is prompted to assure his partner of his presence by another call. The male at this season has a brighter plumage than the female, and in places little frequented by man he becomes very unsuspicious; near villages, however, he is always on the lookout, and is difficult to approach even when he is found by his nest. Toward the end of May and during the first of June the males utter a clear, rich song, which is frequently heard during the twilight of the short Arctic nights. . . .

"The courtship of this handsome bird is carried on very quietly, and I have witnessed no demonstration of anger or quarreling among the rivals. When two
are satisfactorily mated they quickly go about their nesting, after which each pair limits its range to the immediate vicinity of its treasures.

"In Dall's paper on the birds of the Territory he records its arrival on the Yukon during the latter part of May, and adds, that its eggs are generally two in number; but this latter statement must be an error, since the considerable number of nests which I have seen all had complements of four. The young are hatched and on the wing during July, and by the last of September many have already left for the south, but stray individuals are found well into October, the 12th of this month being the last date which I noted."

Mr. John Murdoch, who accompanied the United States Expedition to Point Barrow, Alaska, 1881-1883, states that the American Golden Plover was among the commonest waders in this region. Mr. Murdoch writes*:—"They are among the earlier waders to arrive, as stragglers generally appear about the 20th to the 25th of May, before there is much bare ground. In 1882 a small party in full breeding plumage, and apparently all males, arrived May 21, but no more arrived until June 11. The tundra was at this time bare only along the edge of the beach, and the ice and snow was not yet gone from the lagoons.

"This party remained in nearly the same place for a couple of weeks, feeding on small red worms which they found in marshy spots, and all but two of them were taken, although they were very wild.

"Along through the first and second week in June they continue to arrive in small parties, and from that time on are quite plenty scattered in pairs and threes all over the tundra. They are very wild and difficult to approach, and very noisy. In addition to their ordinary well-known call-note, they have in the breeding season a loud but very melodious cry of 'Tudl'ing!' many times repeated, uttered as the bird flies along rather high, with long slow strokes of the wings.

"They were evidently nesting both seasons before June 20, but neither season were we able to find the nest before the 22nd or 23rd. The nest is exceedingly hard to find, although it is not concealed at all, but is simply a depression in the bare black clayey tundra lined with a little dry moss. The only vegetation on this part of the tundra is white and grayish moss, which harmonizes so extraordinarily with the peculiar blotching of the eggs that it is almost impossible to see them unless one knows exactly where to look. A

favourite nesting site is on the high banks of the gullies or small streams. No nests were ever found in the grass or in swampy ground.

"The sitting birds show great solicitude when disturbed, feigning lameness, and trying to attract one away from the nest. They are shrewd enough always to keep quite a distance from the nest, as long as the collector is anywhere in the vicinity of it, and it is simply time wasted to attempt to find the nest by looking for it, as I know by hard experience. The only way to make sure of the eggs is to withdraw some distance, and sit down patiently and wait for the bird to go back to her eggs, watching her if necessary with a field-glass. Having marked her on to the nest, one must walk towards it in a straight line, looking neither to the right nor the left and keeping his eyes fixed upon the spot she rises from. He is then pretty sure of the eggs. However, the surface of the tundra is so uniform that a careless glance to one side or the other after the bird is flushed may throw the collector wholly off the track, and then he has to go back and wait for the bird to return again.

"Both males and females take a share in the incubation. In 1882 the sitting bird was frequently secured with the eggs, and in every case turned out to be a male; but in 1883 a number of sitting females were taken, and finally, in one or two cases, both parents were taken with the eggs, and both males and females had their breasts bare, as if incubating.

"The nesting season continues till the first or middle of July, about which time the adults begin to collect in flocks, feeding together around the ponds on the higher tundra, associated sometimes with a few Knots or a straggling Curlew.

"The old birds leave for the south about the end of July, and no more Plovers are to be seen till about the middle of August, when the young, who heretofore have been keeping out of sight, scattered over the tundra, gather into flocks, and for several days are quite plenty on the dryer hills and banks, after which they depart. Stragglers may be seen up to the end of August."
OYSTER-CATCHER.
Haematopus ostralegus, Linnæus

F. Poynting del.

Litho Wilhelm Greve, Berlin
CHARADRIIDÆ.]

HÆMATOPUS OSTRALÈGUS, LINNÆUS.

EXPLANATION OF PLATE.

Figure 1. Island of Lewis, May 25, 1886. In collection of R. W. Chase, Esq.
,, 5. Sutherlandshire, May 19, 1890. Ditto.
,, 6. Ditto.

The Oyster-catcher is a well-known resident in the British Islands, breeding on the coasts and, in Scotland, also on the shores of rivers and inland lochs. Its numbers are increased in autumn by migrants from the continent.

Referring to the nesting of the Oyster-catcher, Macgillivray writes *:—"On the shores of the Hebrides, where I have often found it, the nest is generally a slight hollow among the gravel or pebbles above high-water mark; but when a rocky place has been chosen, a few straws and fragments of plants, sometimes small stones and bits of shells, are brought together. The favourite breeding places are headlands and rocky islands, but the nests are sometimes found on sandy beaches. The eggs are generally three, sometimes four, placed with the smaller ends together. They are of a regular oval form, somewhat narrowed towards the smaller extremity, two inches long, an inch and seven-twelfths broad, of a pale greyish-yellow colour, marked all over with dots, spots, and blotches of blackish-brown and amber, with some irregular linear markings of the same. The eggs are usually deposited from the tenth of April to the twentieth of May, and only one brood is reared in the season. Although the parent birds evince great anxiety about their eggs or young, they seldom come very near an intruder, but generally keep flying about at a safe distance, uttering their loud shrill cry."

Messrs. H. A. Macpherson and W. Duckworth write*:—"Contrary to the habits of the species in the north of Scotland, the Oyster-catcher, in Cumberland, is chiefly a littoral bird, constantly nesting on extensive beds of shingle, though a few pairs nestle among sandhills and in meadows near the sea, as well as on the margin of the Solway salt marshes.

"The nest is a slight depression in the sand or shingle, frequently at a short distance above the mark of a high tide. It is generally lined with broken shells or inlaid with fine pebbles; but some nests have no linings, or are surrounded by a few coarse straws. Others, again, are lined with both pebbles and comminuted shells, fragments of rotten wood being carefully disposed around; and we have seen a nest on the edge of Rockliffe marsh lined with the flowers of the sea-pink (Statice Armeria). The first clutches are complete at the beginning of May, and the eggs are much incubated by the end of the month, unless the nests are robbed. The nests are often placed far apart, but a favourite spit of shingle may contain half a dozen nests, within a stone's throw of each other. The Oyster-catcher does not sit very closely; but when the eggs are incubated, the females may occasionally be seen running off the nests, prior to taking wing. The young are active, and squat readily under the cover of long grass, or bolt into any convenient hole to avoid capture. If caught and released, the nestlings run off with great speed, halting from time to time to consider which way to turn. When the young are fledged, the adults continue their charge, and exhibit vociferous distress, if their progeny be endangered. When fully fledged, the young may be seen following the parents in twos and threes, for three eggs constitute a clutch, though we have found a clutch containing four eggs on two different occasions."

Referring to the breeding of this species in Lancashire, Mr. F. S. Mitchell says†:—"The eggs are laid the end of May or early in June, and although the nest is generally only a slight hollow scooped in the sand, it is sometimes beautifully lined with fragments of shell, and often with pieces of wood and sea-weed, and bits of straws. From being placed among the large stones and drift just above high-water mark, the eggs, which so resemble their surroundings in appearance, are not easy to find, and until the young are hatched, the birds are very wary. When this happens, however, they fly round the intruder with piercing shrieks, feigning lameness, and using every artifice to lead him away to a distance. The nest is often placed too among the bays of the sand-hills, and the

* 'Birds of Cumberland,' pp. 139, 140.
† 'Birds of Lancashire,' pp. 181, 182.
eggs are three or four in number, though Mr. Howard Saunders (Zool., 1866) expresses great doubts as to any single bird laying more than three.”

The late Dr. Saxby, in referring to the breeding habits of the Oyster-catcher in Shetland, writes *:—"The usual laying-time is about the end of May, although eggs are sometimes found as early as the beginning of that month, but never later than the middle of July. As the breeding season approaches, pairs of birds may be seen some distance inland, flying high, and constantly uttering their loud peculiar cries. The nest much resembles that of the Ringed Plover, only of course it is larger, and it is found in the same situations, even on gravelly patches some little distance from the sea; the male, too, having a similar fancy for constructing numerous others while his mate is sitting. They both watch it most jealously, and will fly screaming overhead even before it contains eggs. Whether situated upon the gravelly soil or upon the bare rock, either on the shore or on the ledge of a cliff, where I have occasionally found it, the nest is always composed of flat stones or pieces of shells. Sometimes, however, the site selected is a grassy spot near the sea, and then the cavity is lined with dry grass. Writers are given to dilate upon the wonderful instinct which prompts the Ringed Plover and other birds of similar habits to cover the bottom of the nest with pebbles, shells, or herbage, according to the situation in which it is placed; unfortunately for the credit of Oyster-catcher, it gathers withered dry grass only, which forms as great a contrast with the surrounding bright green turf as if shells or pebbles had been chosen instead. I have never seen more than three eggs in a nest, and have only met with one very striking variety, having the ground colour pale greyish green. The spots upon most eggs of this species are usually somewhat small, but now and then a largely blotched and singularly streaked specimen will occur.”

The late Mr. E. T. Booth writes †:—"The Oyster-catcher chooses a variety of situations for breeding-purposes, making but slight preparations for the accommodation of its expected brood. At the Fern Islands it lays its eggs in a mere scratch in the shingle or sand at a short distance above high-water mark. Along the course of several of the Scotch rivers, such as the Spey or the Tay, it forms its humble cradle among the rough stones by the water-side, and is not unfrequently deprived of its eggs or newly hatched brood by the floods that are caused by storms among the hills. In many parts of the Highlands they rear their young in a potato or oat-field, the female sitting plainly in view until the crops get up sufficiently to afford concealment. While travelling by the Highland railway from

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* ‘Birds of Shetland,’ p. 175.
† ‘Rough Notes on Birds observed in the British Islands,’ vol. ii.
Dunkeld towards Aberfeldy or Blair Athol, I often watched several birds sitting on their eggs in the fields near the line. The last time I passed through this glen in spring Oyster-catchers were by no means so numerous as in former days, though a few were noticed near the station at Ballinluig. I have also seen the eggs lying openly on the summit of some of the large detached blocks of rock that are found along the shore off the west coasts of Ross and Sutherland."

Mr. H. Seebohm says the eggs "vary in length from 2·35 to 2·07 inch, and in breadth from 1·6 to 1·47 inch." *

Mr. H. E. Dresser states that the measurements of a series of eggs of this species in his collection vary from 2·4 by 1·57 inch to 2·17 by 1·47 inch.†

* 'History of British Birds,' vol. iii. p. 8.
AVOCET.
Recurvirostra avocetta, Linnaeus
AVOCET.

Scolopacide.]
RECURVIROSTRA AVOCETTA, LINNÆUS.

EXPLANATION OF PLATE.

Figure 1. River Guadalquivir, Spain, May 1889. In collection of H. Massey, Esq.
"  2. South Spain, April 30, 1890. Ditto.
"  4. South Spain, April 30, 1890. In collection of H. Massey, Esq.

Although this species formerly bred in England, it is now only known as a rare spring and autumn migrant to the British Islands.

Mr. H. Seebohm writes*:—"At the commencement of the present century the Avocet was a well-known and common summer visitor to the low-lying eastern counties of England; but now, owing to the drainage of its favourite fens and the reclamation of its chosen marshes, it is only known as a straggler on migration. At irregular intervals a few Avocets appear in spring, less frequently in autumn, at what was formerly their breeding-grounds; but they are remorselessly shot down by collectors of rare birds. There is no reliable evidence that the Avocet has bred in our islands for the past sixty years. Its breeding-haunts were apparently confined to the marshes of Lincolnshire, Norfolk, Suffolk, and Romney Marsh in Kent. To the rest of England the Avocet was, and is, only known as an accidental straggler, becoming much rarer in the north. Only about half a dozen specimens have been recorded from Scotland, where it has been met with as far north as the Shetlands, and as far west as Stornoway, in the Outer Hebrides. In Ireland it is equally scarce, being only known as an extremely rare straggler.

"The increase of population and the drainage of marshes have restricted the breeding-places of the Avocet in Europe to the islands off the coast of Denmark and Holland, the marshes of Southern Spain, the delta of the Rhone, and the

lagoons on the shores of the Black Sea. To Southern Scandinavia and the rest of Central and Southern Europe, with the exception above mentioned, the Avocet has become, as it is in our islands, only an accidental visitor; but further east it is more abundant, breeding in Palestine and Persia, where it is a resident, and in North Turkestan, the extreme south-west of Siberia, South-east Mongolia, and South Dauria, where it is a summer visitor, wintering in China, Formosa, Hainan, India, and occasionally Ceylon. It has been recorded from the main island of Japan. In Asia Minor it is principally known on passage, though a few are said to remain during the winter; and it is said to breed throughout Africa in suitable localities.

"The breeding-season of the Avocet commences in the first half of May in Western Europe, but in Eastern Europe, in the valley of the Danube, where the seasons are later, its eggs are not laid before the beginning of June. I have taken the eggs of this bird in Jutland and in the valley of the Danube. The west of Jutland is flat—not a dead flat, but gently undulating. Its most striking peculiarity is the almost entire absence of trees. It has evidently once been sand, with a deposit of bog in the lower lands. Sometimes for miles you travel over desolate and monotonous heaths; but where the soil is better it is drained and cultivated. These parts of the country look less desolate, but quite as monotonous. The houses are scattered over the country, seldom collected in villages, each the facsimile of the other, and without a single element of picturesqueness. At Tarm a river winds through some extensive marshes, and often in many channels reaches a fjord perhaps six or eight miles off. These marshes are rich in birds. At the south end of this fjord is a peninsula, a square mile or two in extent, separated by a narrow bay from the line of sand-hills or dunes which flank the sea. To this paradise of Waders I made a visit on the 15th of May, 1879, in search of the colony of Avocets which breed there every year. We drove across country along hard roads, sandy tracts, over mud, through water, to the grassy flat of the promontory. . . . As we neared the fjord, Lesser, Common, and Black Terns flew past us; and when we arrived on the peninsula we were soon the centre of attraction of Dunlins, Redshanks, and Ringed Plovers, whose breeding-grounds we were invading. A flock of Curlews would not allow us to come within range. Dunlins were mostly in pairs, and we took a nest or two of eggs. We found a few Redshanks' eggs, but were evidently too early for the Ruffs. Ringed Plovers had young a few days old, but the Gulls and Terns had not begun to breed. All this time we searched in vain for the Avocets. We saw neither birds nor eggs. Our guides declared that we were a fortnight too early, and that the birds had not arrived. We retraced our steps and had little more than a mile
further to go, when we caught sight of a bird struggling in a snare on a grassy flat, separated by a half-dried-up stream full of black mud and *Equisetum* from the main promontory. We soon struggled across, and were delighted to find an Avocet caught in a snare, placed over a nest containing four eggs. In five minutes we found five more nests, three containing four eggs each, and the others only two. Over each nest a snare was placed. One Avocet only flew over whilst we were there, probably the mate of the captured bird; it uttered its somewhat feeble and monosyllabic cry. The nests were mere hollows in the short grass, with a small handful of dry grass and leaves as lining. We waited some time, and a pair of birds came back. They seemed to have swam ashore, as they came from the sea, and were not seen to alight. They did not appear to have discovered that the nests had been robbed; for when some Gulls came over they flew up at them, and chased them away with screams. Rejoining our conveyance we crossed some shallow water and made for the 'dunes.' About halfway across we came upon a party of perhaps fifty Avocets walking in the shallow water and moving their bills from side to side in the sand at the bottom, occasionally tossing up their heads. We tried to stalk them with our heavy conveyance; but our driver made a muddle of it, and a right and left barrel failed to get us a second specimen. The nests I found in the valley of the Danube on the 10th of June, 1883, were most of them slight, but some had more foundation than others. They were always built on the dry land.

"The eggs of the Avocet are three or four in number, but in exceptional cases it is said that as many as five have been found. They are pale buffish brown in ground-colour, spotted and blotched with rich dark brown, and with underlying markings of grey. They are pyriform in shape, and are subject to but little variety in colour. On some specimens the spots are small and evenly dispersed over the entire surface, whilst on others they more frequently take the form of irregular blotches. They vary in length from 2·0 to 1·9 inch, and in breadth from 1·45 to 1·35 inch. Some eggs of the Avocet are almost indistinguishable from certain varieties of the eggs of the Grey Plover and the Lapwing; but, as a rule, the eggs of the former are richer in ground-colour, and those of the latter are smaller, darker, and more heavily marked. It is said that both parents assist in incubating the eggs. Only one brood appears to be reared in the year. Some doubt exists as to how the old birds feed their young; and as no one has yet observed them being fed by their parents, the interesting question is still undecided."

Mr. H. E. Dresser states that the measurements of a series of eggs of the Avocet in his collection vary from 2·02 by 1·52 inch to 1·95 by 1·47 inch.*

The late Mr. H. Stevenson has published an interesting account of the former breeding of this species in Norfolk. Writing in 1870, he says *:—"When examining a recently killed specimen of the Avocet, so great a prize now a days to the local collector, it seems hard to believe that such a remarkable species should have bred regularly in this county until within the last half century. Yet that this was the case we know from the living testimony of both sportsmen and professional gunners, in whose younger days this bird was comparatively common. Sir Thomas Browne, unfortunately, gives scarcely any information as to the localities frequented by it in his time, merely speaking of the 'shoeing-horn' as 'a summer marsh-bird and not unfrequent in Marshland,' from which, however, one may infer that it was then a denizen of the extreme western side of the county as well as of the coast-line to the north and east. From later authors the only breeding stations of which we have any record, are Winterton and Horsey, and a spot near the Seven-mile House, on the Bure or North River, all in the neighbourhood of Yarmouth, as well as the far-famed Salthouse marshes, near Blakeney, their last haunt in the Eastern Counties."

After giving details respecting the three breeding stations first named, Mr. Stevenson continues ‡:—"At Salthouse, long prior to the drainage of the marshes and the erection of a raised sea-bank, the Avocets had become exterminated by the same wanton destruction of both birds and eggs as is yearly diminishing the numbers of Lesser Terns and Ringed Plover on the adjacent beach. I have conversed with an octogenarian fowler and marshman named Piggott, who remembered the 'Clinkers' (as the Avocet was there called) breeding in the marshes 'by hundreds,' and used constantly to gather their eggs. Mr. Dowell, also, was informed by the late Harry Overton, a well known gunner, in that neighbourhood, that in his young time he used to gather the Avocet's eggs, filling his cap, coat pockets, and even his stockings; and the poor people thereabouts made puddings and pancakes of them. The birds were also as recklessly destroyed, for the gunners, to unload their punt guns, would sometimes fire at and kill ten or twelve at a shot. No wonder, then, if the Avocets thus constantly persecuted gradually became scarce. It is stated, moreover, by Mr. Lubbock that their feathers were much sought after to make artificial flies. Here as in the previous instances, at Horsey and Winterton, it is difficult to fix the exact date of extinction, but it is probable from the following particulars kindly communicated by Mr. W. J. Cubitt, of this city, that it occurred between

* 'Birds of Norfolk,' vol. ii. pp. 237, 238.
‡ Pp. 240, 241
1822 and 1825, as he remembers, about that time, visiting Salthouse, in summer, with Mr. Jary, of South Walsham, when two or three couples were shot, and a boy waded through the swamp and brought out a young bird. A single bird was left, which he understood was seen there for some time after, but he fears that this expedition saw the last of the Avocets. They bred on the salt marshes, subject to constant inundations from the sea, beyond the shingly beach, and consequently the ground was full of holes and soft places, which rendered it difficult to reach their breeding sites. From the records of specimens killed subsequently to that date, at Salthouse, it seems that until those marshes were altogether reclaimed in 1851, stragglers from time to time still visited their old haunt, on their migratory passage; but of late the few that have appeared on our coast have been met with either on Breydon or in the neighbourhood of Lynn."

Messrs. A. Chapman and W. J. Buck found the Avocet breeding on the marisma of the Lower Guadalquivír in May. Comparing the eggs of this species with those of the Black-winged Stilt, they write *:—"The Avocet's eggs are larger and lighter in colour, and these birds seldom have any nest at all, the three eggs merely laid at random on the bare cracked mud, and often an inch or two apart. Three is the usual complement."

Mr. Alfred C. Chapman, accompanied by his brother, Mr. Abel Chapman, visited West Jutland in May 1893 for the purpose of studying various marsh-breeding birds. Mr. A. C. Chapman has published the following interesting observations, made during their visit, on the breeding habits of the Avocet, Ruff, and Redshank †:—"The coast where the Terns were breeding was separated from an extensive fiord, or shallow marine area, by a very long narrow strip of sandhills and bent-grass, and at one point in the fiord a level promontory projected some four or five miles into the fiord. The whole surface of this headland was overgrown with short salt-grass, raised about a couple of feet above high-water mark, and at low tide large areas of sand and mud were laid bare, extending in some directions far beyond the shores of the promontory itself. Dotted about in the fiord, beyond the boundaries of the salt-grass spit, were sundry islets, covered with a rougher kind of sea-grass and bordered in places with reeds. This whole area was alive with birds. We spent the 15th day of May on this salt-spit and on such of the islets as we had time to explore. We commenced the day by proceeding direct to the furthest extremity of the promontory. . . . . Distributed all over the promontory and about the islets were immense numbers of Redshanks,

* 'Wild Spain,' p. 87.
and the grass being so short they had difficulty in concealing their eggs with their accustomed caution; they were just beginning to lay. In like manner Reeves were breeding in considerable numbers; but they seemed to prefer the islets, where the grass was longer and rougher, and here we found most of their nests. We were informed that the Reeves had arrived at their breeding-grounds about April 23rd, and that the Avocets (Recurvirostra avocetta), which also were breeding here, had arrived about a week earlier. . . . . This hearsay evidence seemed to be correct, because the Avocets had already full clutches of eggs, while in most cases the Reeves were still only laying. The Reeves were breeding on the islets and promontory, as well as in suitable places amongst the sandhills, but the Avocets appeared to confine themselves entirely to the salt-grass. The Reeves seemed to breed quite separately one from another; but it was noticeable that the Avocets had a tendency to congregate, and that they were nearly all breeding in two or three more or less confined areas of ground. The Reeve invariably chooses a tuft of long rough grass for its nest, which is deep and always well concealed, whereas the nests of the Avocets were merely such depressions as would be caused by the reposing of the bird on the grass. Four is the usual complement of eggs with both these species, but in many cases there were only three, while one Avocet's nest contained five eggs. In one instance a Redshank and Reeve had laid together in the same nest. The Avocets cannot be said to be tame at their nests; they keep circling round, uttering a pretty liquid cry, like 'whick-whick,' but they seldom come within shot, though, with the aid of a stalking-horse, I was able to shoot one specimen with a walking-stick gun."
BLACK-WINGED STILT.

Himantopus candidus, Bonnaterre
The Black-winged Stilt is an accidental visitor to the British Islands, its chief occurrences having been in the summer months.

Mr. Howard Saunders writes *:—“To Denmark, Germany, Holland and the north of France the Black-winged Stilt is only a straggler, but—like the Avocet—it breeds sparingly on the Neusiedler See in Hungary, more freely in the Camargue at the mouth of the Rhone, and abundantly in the marismas of Southern Spain, as well as in the marshes of Sicily, and on the low shores of the Black, Caspian and Aral Seas. It also nests freely by the lakes of North Africa, though even there, as well as in the Canaries and throughout the basin of the Mediterranean, the bird is almost entirely a migrant, arriving in March or April and seldom remaining after the end of November. In winter it is found down both sides of Africa and in Madagascar; while in Asia it inhabits the warm and temperate regions, large numbers breeding in some parts of the north of India, and also in Ceylon.

“The eggs, full clutches of which I have found plentiful in the south of Spain by May 4th, are usually 4 in number, and are of a warm stone-colour with hieroglyphic-like scrollings and blotches of black.”

Mr. O. Salvin, in his notes on “Five Months’ Birds’-nesting in the Eastern Atlas” in 1857, referring to this species, writes †:—“Abundant at Zana, a few pairs occurring at Djendeli and Guerah el Tharf. Over the whole of the lower

† 'Ibis,' 1859, p. 360.
end of the marsh of Zana and Chot Saboun the Stilt breeds in great abundance amongst the wet grass, choosing for the position of its nest a small turf, so as just to keep the eggs out of the water. Sometimes, however, this object is not attained, as we occasionally found nests in which the eggs were half immersed. The bird uses its long legs with much greater ease than might be expected; and its long, deliberate strides, as it stalks about in search of food, are far from being ungraceful. The only time they seem to be in its way is at the moment of taking flight, when they hang awkwardly down till the bird, being fairly started, stretches them out, extending them far beyond the tail. We used to search for the nests of this bird on horseback, and, on observing one sitting, to ride up without taking our eyes off the place. The bird would remain quiet till we were within thirty yards of the nest, when it would walk slowly away, till, aware of our purpose, it would rise and fly wheeling and screaming overhead. The young Stilt is able to walk almost immediately on leaving the egg; one we found was capable of moving about while the other three were struggling to free themselves from the shell. The nest is composed of a few bits of dead reed or grass. The complement of eggs laid by one bird is four."

Mr. H. Seebohm writes*: "Few sights are more interesting to an English ornithologist than a breeding colony of Stilts. If quietly approached, they may be watched standing up to their knees in water, catching little tadpoles and water-beetles, picking up floating shell-fish, or snapping at the gnats in the air, or the water-spiders dancing on the surface of the lagoons. Perhaps it looks most elegant as it trips daintily on the yellow ooze, which scarcely seems to bend beneath its light weight. Sometimes two or three may be seen feeding together, walking with deliberate graceful step, which is occasionally quickened almost into a run; but they seldom utter a note. They do not seem to be particularly shy; and it is not necessary to keep concealed amongst the reeds, except when you approach the nests. Then the habits of the birds change entirely: all idea of feeding is given up; their whole attention is absorbed in the effort to decoy you from the colony; they are alarmed for the safety of their eggs, and in their excitement they suddenly become noisy birds. As they run along the sand, with uplifted wings, they look the perfection of beauty and grace; but they soon take wing, and try hard to lead you inland to the steppe. Generally two or three fly together, looking almost like miniature Storks as they pass over: the neck is outstretched and the bill is slightly depressed; whilst the long red legs, which reach considerably beyond the tail, are also extended slightly below the horizontal line. The motion of the

* 'History of British Birds,' vol. iii. pp. 80, 81.
wings is not very rapid, but the line of flight is straight; now and then the bird skims along for a short distance with outspread motionless wings; and whilst thus sailing slowly along it has a curious habit of dropping its legs; but this action is performed so high in the air that the bird can scarcely be making preparations to alight, and may perhaps only be trying to attract attention to itself. All this time the birds are noisy enough. It has two cries of anxiety at the nest—one a sharp rapidly repeated kit, kit, kit, or hit, hit, hit, and the other a sort of rattling note, resembling the syllable peur-r-re. As the wily bird succeeds in luring the intruder away from its treasures, it does not fly so near him; the former note only is heard, and is less rapidly and less anxiously repeated; the final t is omitted or is inaudible, and the note sounds like gee, gee, gee.

"When Mr. Young and I were in the Dobrudsha in 1883, we found a small colony of seven nests on the 7th of June. The first nest was somewhat isolated, built amongst the very outermost straggling reeds, and two or three birds were standing in the water not very far from it. It was very flat, and stood from two to three inches above the level of the water; the slight hollow was about six inches across, and the nest was about eight inches in diameter at the surface of the water. It was entirely composed of broken bits of old dead reeds, the slenderest pieces being reserved for the lining. Twenty yards further on was the main colony, consisting of five similar nests, built on the bare black mud between the reeds and the water, and distributed over a space of perhaps twenty or thirty yards; whilst the seventh nest was again somewhat isolated, built in the water at least six feet away from the reeds, and placed upon a heap of yellow ooze, which had evidently been collected for a foundation. One nest contained a single egg; the other six had the full clutch of four: all the eggs were fresh except one clutch, which was slightly incubated."

Messrs. A. Chapman and W. J. Buck found the Stilt breeding, in company with the Avocet, on the marisma of the Lower Guadalquivir. They write*:

"After heavy rains in April, the mud and water in the marisma were unpleasantly deep for either riding or walking—we had now abandoned the punts; and on the low islands many thousands of eggs had been destroyed by the rising of the water. A great variety of birds were now nesting, Stilts and Avocets being, perhaps, the most conspicuous. We found a few eggs of both on the mud-flats to-day (May 5th), but a few days later they were in thousands. The Stilts make a fairly solid nest of dead black stalks of tamarisk, &c., and lay four richly-marked eggs, all arranged points inwards."

* 'Wild Spain,' pp. 86, 87.
Mr. A. O. Hume gives the following account of the breeding habits of this species in Upper India and in Ceylon * :—

"The only places in Upper India where I have seen the Stilt breeding are in and about clusters of salt-works situated in the Goorgaon District, about thirty-five miles south of Delhi, known collectively as the Sultanpoor Works. . . .

"The birds are seen in small numbers throughout the year, but congregate in great numbers towards the middle of April about the works, which consist of brine-wells and many hundred acres of shallow, rectangular, evaporating-pans from 100 to 200 feet square, and from 6 to 10 inches deep. These pans are merely depressions dug in the soil and lined with chunam or fine lime obtained by burning kunker, a nodular concretionary limestone found in beds near the surface more or less throughout the plains of Upper India. Small strips of ground from a foot to five or six feet broad divide the pans, and on the margins of these, or even in the beds of disused pans, where only a little brine ever stands, the Stilts build their nests.

"They collect together small pieces of kunker, or the broken limelining of the pans, into a circular platform from seven to even twelve inches in diameter and from two to three inches in height; on this again they place a little dry grass, on which they usually lay four eggs, but not unfrequently only two or three. They begin to lay, according to season, towards the end of April or the beginning of May; and by the beginning of June numbers of young are to be seen about, and by the 1st July most of the eggs that remain are hard-set. The majority of the birds lay during June, earlier or later according to season.

"The temperature of the nest at this time in the full sun probably averages quite 140° Fahrenheit.

"The birds have their choice of sites, though on what this depends I could not find out. Not one nest was found in two successive seasons at Balpoor or Kuliawas; very few at Sultanpoor. On the other hand, at Moobarikpoor (and all the works are exact facsimiles one of the other) the nests were in some places crowded to an inconceivable degree. On one strip, about 3 feet wide and 100 feet long, there were twenty-seven nests on one margin and eleven on the other, besides five nests of the Red-wattled Lapwing. So accustomed were the birds to the workmen walking up and down the middle of this strip that many of the birds never moved, though we passed within a few inches of them, and those that did move merely stalked leisurely a few paces away into the salt-pans on either side. . . .

"Colonel Legge writes from Ceylon:—'Great numbers of these birds were breeding at Minery and Kandclay tanks this year. At the latter place I found many fresh eggs as late as the 4th of August; many others were hard-set, but no young were, up to that time, to be found. In the south I have found young as early as the end of June. The spot chosen to breed in, at Kandelay, is an island in the tank; the ground is partly shingly and partly overlaid with soil, rock cropping out in one or two places. I found the nests in all situations and very variously constructed; some were holes scooped in the ground and lined with large gravel only; some constructed amidst lumps of flood-deposit; some scraped in the ground and scantily lined with small twigs and grass-stalks; others made in depressions in rock and built entirely of little sticks and other matter taken from the 'flood-wreck.' The eggs were mostly four in number, though many nests contained three hard-set; they were for the most part not placed point to point, and varied immensely in size and ground-colour. . . . . When its breeding-grounds are approached the Stilt is very clamorous, flying towards the intruder and passing to and fro over his head, with loud harsh cries, but when the vicinity of its nest is reached, it usually retires and alights at some little distance, allowing its nest to be rifled without further manifestation.' . . . . In length the eggs vary from 1·5 to 1·8, and in breadth from 1·1 to 1·32; but the average of sixty-four eggs taken at random out of over three hundred and carefully measured was 1·64 by 1·21."

Mr. H. Seebohm states that the eggs of the Black-winged Stilt "vary in length from 1·85 to 1·5 inch, and in breadth from 1·32 to 1·1 inch." *

Mr. H. E. Dresser states that the measurements of eggs of this species in his collection vary from 1·82 by 1·27 inch to 1·57 by 1·2 inch.†

* 'History of British Birds,' vol. iii. p. 82.
WOODCOCK.
Scolopax rusticola, Linnaeus.
WOODCOCK.

*SCOLOPACIDÆ.*

**SCOLOPAX RUSTICULA, LINNÆUS.**

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**Explanation of Plate.**

Figure 1. Wermland, Sweden, May 10, 1892.

,, 2. European.
,, 3. Longtown, Cumberland, April 24, 1892. In collection of H. Massey, Esq.
,, 4. Westmorland, April 22, 1891.
,, 5. Teneriffe, April 6, 1892.
,, 6. Tile Pill, Cumberland, April 4, 1892.

The Woodcock is a common winter visitor, an increasing number remaining to breed in the British Islands.

With reference to the Woodcock, Mr. Howard Saunders writes *:—"The annual 'flights' of this well-known species usually make their appearance in October, a return migration northwards being noticed in March, by which time the birds which intend to breed in our islands have betaken themselves to suitable coverts. Of late years, owing to the increase of plantations—especially of conifers—in the vicinity of cultivated ground, the number of those which remain has been greatly augmented; nests having been found in all parts of England, and probably of Scotland and Ireland, except on some of the barest islands. . . .

"The eggs—often laid early in March, though more frequently in April—are usually 4 in number; they are slightly pyriform, and of a yellowish-white colour, blotched with ash-grey and two shades of reddish-brown: average measurements 1:75 by 1:3 in. The nest is merely a depression in some sheltered place, a lining of dead leaves being added during the progress of incubation. It is notorious that the female often removes her young, although the manner has been much disputed; the balance of evidence appears to be that the nestling is clasped between the thighs of the old bird and pressed close up to her body, sometimes even to the base of the bill. During the day the Woodcock rests in dry grassy bottoms, or beneath thick bushes—such as holly or laurel, but

at dusk and early in the morning, especially during breeding-time, the male persistently follows certain tracks along glades in woods—often called 'cock-roads'—uttering a deep as well as a whistling note; similar routes are also traversed by both sexes on their way to and from their feeding-grounds."

Mr. H. Seebohm gives the following amusing account of his visit to a Woodcock’s nest*:—"On the 18th of April, 1870, I went over from Sheffield to Edwinstowe, having received information from a gamekeeper that a Woodcock was sitting on four eggs in one of the Welbeck woods. I left the little inn at ten o’clock on a brilliant moonlight night, in the company of a woodman who had discovered the nest about a fortnight previously. The night was warm and still, and we did not meet a soul during our five miles walk through the forest, and scarcely heard a sound, except the occasional cry of a cock Pheasant awakened by our footsteps. Arrived at the spot the woodman pointed out a clump of last year’s bracken, under the spreading boughs of one of the old oak trees with which the forest abounds, and in the midst of a number of birch trees which the woodmen were engaged in felling. In the midst of this the nest was placed, on the ground, and was little more than a hollow scratched in the earth, and lined with a few leaves and a little dry grass. The bird did not leave her nest until I was within a few feet of her. After watching her disappear under the branches, I bent aside the bracken and looked at the four eggs. As I had never taken Woodcocks’ eggs before, I said to the woodman that I should like to carry them away; he replied that the gamekeeper knew of his having found the nest, and that if the eggs were taken he would probably lose his situation. The sight of a half-sovereign, however, developed his imaginative faculties, and he suggested that I should be satisfied with three of the eggs, and that fragments of the shell of the fourth should be scattered close to the nest, to convince the gamekeeper that the eggs had hatched out. This was accordingly done, and the three eggs were brought home to the inn in triumph. On my congratulating him upon the cleverness with which the theft had been made, he replied, ‘O yes, Sir; I would not have taken you if I had not known that we could have done it innocent.’"

Mr. John J. Dalgleish supplied the following interesting notes on the habits of this species to Mr. H. E. Dresser, who published them in his 'Birds of Europe'†:—"My knowledge of the habits of the Woodcock extends principally to the central district of Scotland north of the Firth of Forth and to the western coast of Argyllshire. In the former, through the counties of Stirling, Clack-

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† Vol. vii. pp. 625, 626.
mannel, south of Perthshire, Kinross, and Fife it is generally distributed, but nowhere in great numbers, and almost always in cover, although I once killed one in a turnip-field. On my own property, near Culross, and within two miles of the upper reach of the Firth of Forth, and which contains about 500 acres of cover, there may be from ten to thirty killed annually, according to the season. Their numbers are of course greatly augmented in the winter, large numbers of immigrants being added to those which breed (as after mentioned): indeed I am not sure whether all of those we have in winter are immigrants, and that those which breed with us move further south in pursuance of their migratory instinct; but this is a point very difficult to discover. In the district I now allude to, their numbers are much diminished on the appearance of severe frosty weather, when they appear to go to the coast, where they find the feeding-grounds more open; if, however, the frost be slight, they remain.

"On the west coast of Argyllshire they are found in greater numbers, and are not so much confined to covers, being found in open weather scattered through all the sheltered glens where there is any brushwood or even bracken. On the occurrence of frost, however, they all gather to the low-lying covers near the sea, where its influence serves to keep open the springs; and in such weather very large bags are often made, as they seem to come not only from the outlying spots above mentioned, but from the inland districts, where the frost has sealed up every one of their usual haunts. I have not beside me, but hope to send you in a few days, if not too late, a note of some bags made on such occasions.

"In both of the above districts I have observed with much interest the evening flight of the Woodcock in summer, while they have young, and are engaged apparently in carrying food to them, flying back and forward from their roosting-places to their feeding-grounds. These latter appear to be, in the West Highlands, generally near the shore, as the flight of the birds is generally directed towards it. While passing overhead thus in their semi-owllike flight, they constantly utter their peculiar double note, first a cheep and then a double croak, in quick succession.

"The breeding of the Woodcock does not seem to have been observed in any of the districts above mentioned until within the last twenty years; but in both it now breeds regularly, and in, I think, increasing numbers.

"I have known of their nests from early in March to at least the 17th of May, when I have found fresh eggs; and thus I think it possible that they may bring up two broods in the season. The eggs are generally placed in an open part of the wood, where there is little under cover, and where any decayed leaves may be lying, no nest being formed, the bird seeming to trust to their not being
discovered owing to the manner in which they harmonize with the dead leaves.

"I have had on three occasions the good fortune to see the Woodcock in the act of carrying her young. On the first occasion the bird rose from my feet one day in the month of June, in a thick coppice cover in Argyllshire, and flew with her strange burden carried between her thighs for about thirty yards, in the manner well described in a note in Mr. Gray's 'Birds of the West of Scotland.' On following her she again rose, still carrying the young one, and flew into some thick cover. On this and the next occasion, which was in Perthshire, the birds uttered no cry; but the last time I witnessed this curious habit, which was on the 5th of May last, the bird made the peculiar cry alluded to in the note in Mr. Gray's work. On this occasion I could observe the bird more distinctly, as it was in an old oak cover, with very little underwood, where I discovered her. On rising she flew from thirty-five to forty yards, calling as above mentioned, and then, alighting among some grass, seemed to flutter along, still retaining hold of the chick. On raising her again the same manoeuvre was repeated, only that the distance flown each time was greater, but always in the segment of a circle, as if she were unwilling to leave the rest of the brood. On returning to the spot where she rose at first, I discovered one of these, which was more than half-grown, the quill-feathers being well formed, and must altogether have formed rather a heavy burden. On taking it up it uttered a cry, which was at once responded to by the parent bird, although the latter did not again take to wing from the bushes into which it had ultimately flown."

Mr. A. O. Hume writes *:—"My friend, the late Mr. A. Anderson, found the eggs of the Woodcock on the Himalayas. The following is his account: he wrote:—

"'On the 30th of June I turned my face towards the snows in another direction, determined to consider my expedition a failure so long as the discovery of the breeding-habits of the Woodcock still remained a desideratum, which was one of the chief objects of my expedition. After two days' stiff marching I pitched camp at a place called Kemo, at an elevation of some 10,000 feet, over and against Namick, which is celebrated for its salt-springs.

"'Here my luck culminated; and I have probably to thank my fellow-traveller, Dr. Triphook (an ardent sportsman, and quite game to fag all day with his rifle or my collecting-gun as the case might require), for not only the most beautiful clutch of Woodcock's eggs I have ever seen, but the first that have as yet been taken in this country.

"We were following up a huge wounded *Presbytis schistaceus* (I was anxious to compare it with the Central-Indian form) through a dense undergrowth of Ringalls, when a Woodcock rose close to us, dropping again almost immediately, and disappearing in the cover. A diligent search revealed the long-looked-for prize, four eggs, which were deposited in a slight depression in the damp soil, and embedded amongst a lot of wet leaves, the thin ends pointing inwards and downwards into the ground.

"The eggs found (I could see they were hard-set), I told Triphook I had no intention of leaving the place without bagging the bird. It was raining heavily and bitterly cold, with the thermometer down to 40°; but, fortunately for us, before we had had time to make ourselves comfortable under an adjoining tree, the bird flew back in a sort of semicircle, alighted, and ran on to her nest. No sooner down than she was off again, frightened, as I subsequently learnt, at one of our dogs, but which at first thought alarmed me not a little, as I imagined she was removing her eggs. After having satisfied myself that my suspicions were unfounded, it was decided that, as I had done my duty in finding the nest, shooting the bird should devolve on Triphook, and right well he did it, considering all the disadvantages which militate against having a snap shot in dense cover and in a thick mist. I never do anything but miss on such critical occasions; at any rate I would rather some one else make a mull of it than myself!

"The eggs, as before mentioned, are a most beautiful set; in consequence of the advanced state of incubation, it was a full month before they were made into good specimens; a week later and the chicks would have been hatched. They are far darker and redder than the usual run of Woodcocks' eggs, all four resembling the second figure in Hewitson's work, and in the character of their markings they are not unlike richly coloured specimens of some Terns' eggs. They are remarkable for the roundness of their form, and in having none of the pyriform or pear-shaped character which distinguishes the eggs of all allied species."

Mr. Seebohm says the eggs of the Woodcock vary in length from 1·8 to 1·6 inch, and in breadth from 1·4 to 1·3 inch.*

Mr. H. E. Dresser states that eggs of this species in his collection vary from 1·77 by 1·32 inch to 1·7 by 1·3 inch.†

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* 'History of British Birds,' vol. iii. p. 235.
PECTORAL SANDPIPER.
Tringa maculata, Vaurie.
PECTORAL SANDPIPER.

Scolopacidæ.]  
TRINGA MACULATA, Vieillot.

Explanation of Plate.

Figure 1. Point Barrow, Alaska, June 28, 1883; Lieut. Ray Expedition. No. 18962 U.S. National Museum Collection.  

This American species is a rare accidental visitor, there being about twenty records of its occurrence in the British Islands, nearly all in autumn and winter.

Referring to the Pectoral Sandpiper, Mr. Howard Saunders writes*:—“This species has not as yet been met with on the Continent of Europe, nor does it appear to have crossed from the American side of Bering Strait to Asia, although its Old World representative, T. acuminata, does occasionally visit Alaska. In summer it is widely, though somewhat irregularly, distributed across the barrens-grounds, from Point Barrow and the mouth of the Yukon to Hudson Bay; while on migration it is common throughout the Dominion of Canada and the United States, except on the coast of the Pacific; ranging to the Bermudas, Bahamas and West Indies generally, and as far south as Patagonia and Chili. As a straggler it has occurred in Greenland. The breeding-habits of the Pectoral Sandpiper were practically unknown until the United States Expedition to Point

Barrow in Alaska, when, in 1882 and 1883, eighteen sets of eggs were obtained, each complete clutch consisting of 4."

Mr. John Murdoch, who was stationed at Point Barrow, Alaska, from 1881 to 1883, gives the following interesting account of the breeding habits of the Pectoral Sandpiper*:

"Though this species is very common over the whole continent, and in fact over the greater part of the world, its eggs and breeding habits have hitherto been undescribed †. We had the good fortune to find them breeding in considerable abundance in the neighbourhood of the station, and were able to bring home a good series of authentic eggs.

"It is one of the commonest of our waders, occurring all over the tundra in all sorts of situations, though never found on the beach.

"There is frequently a great disparity of size between the two sexes. A comparison of the large series we collected shows that the average length of the female is about three-quarters of an inch less than that of the male, but that the smallest adult female was fully an inch and a half shorter than the largest male. The difference in size is so marked that the natives noticed it and insisted that the small females were not Aibwákia, but Niwiliwilák (Ereunetes pusillus).

"They arrive about the end of May or early in June, and frequent the small ponds and marshy portions of the tundra along the shore, sometimes associated with other small waders, especially with the Buff-breasted Sandpipers on the high banks of Nunava. Early in the season they are frequently in large-sized flocks feeding together around and in the Eskimo village at Cape Smythe, but later become thoroughly scattered all over the tundra.

"They begin pairing soon after their arrival, and are frequently to be seen chasing each other in the air with a loud chatter. The male has a curious habit at this season of the year. The skin of the throat is much distended and loaded with slimy fat, and can be puffed out like the throat of a pouter pigeon. During


† To this statement Mr. Murdoch adds the following explanatory note:—"Since the above was written, Mr. E. W. Nelson, formerly United States Signal Service observer at Saint Michael's, Alaska, has published ('Auk,' vol. i. no. 3, pp. 218–224) an excellent detailed account of the breeding habits of this species, as observed by him in the delta of the Yukon. His observations agree very closely with ours, except that he observed the male bird 'hooting' while on the ground. The observations of Dr. Adams, quoted by Mr. Nelson, had escaped my notice as well as his. The note, however, merely states that drawings made by Dr. Adams, and representing the male bird with his throat puffed out, were exhibited at a meeting of the Zoological Society, so that to Mr. Nelson belongs the credit of first making and publishing complete observations on the subject."
the breeding season, that is from the first of June to the first of July, the male may frequently be seen taking short, low flights, with the wings held high and beaten stiffly, while the throat is puffed out to its fullest extent, and the bird utters a most peculiar muffled hoot 'hoo, hoo, hoo, hoo,' many times repeated. There is something ventriloquial about the sound, which makes it seem as if uttered by some creature a long distance off, and it was some time before we could be certain that it was the Pectoral Sandpipers that were making the noise. This hoot is only uttered on the wing as far as I was able to observe, though the males may be often seen to puff out their throats as they sit on the little knolls.

"They get their native name 'Aibwākia,' the 'walrus bird,' from this habit of swelling out their throats, like 'Aibwāk,' the walrus.

"After the breeding season, they keep very quiet and retired, like the rest of the waders, and the adults appear to slip quietly away without collecting into flocks, as soon as the young are able to take care of themselves.

"As soon as the young have assumed the complete fall plumage, that is about the 10th of August, they gather in large flocks with the other young waders, especially about the small ponds on the high land below Cape Smythe, and stay for several days before they take their departure for the south. Stray birds remain as late as the first week of September.

"The nest is always built in the grass, with a decided preference for high and dry localities like the banks of gullies and streams. It was sometimes placed at the edge of a small pool, but always in grass and in a dry place, never in the black clay and moss, like the Plover and Buff-breasted Sandpipers, or in the marsh, like the Phalaropes. The nest was like that of the other waders, a depression in the ground lined with a little dry grass.

"All the complete sets of eggs we found contained four. The following is a description of the eggs, obtained from the examination of eighteen sets. They are pointedly pyriform like those of the other small waders.

"The following measurements, in inches, indicate the size, shape, and limits of variation:—1·58 by 1·06; 1·44 by 1·11; 1·42 by 1·08; 1·54 by 1·02.

"In color and markings they closely resemble the eggs of the other small waders. The ground color is drab, sometimes with a greenish tinge, though never so green as in the egg of P. alpina americana, and sometimes a pale bistre-brown. The markings are blotchings of clearumber brown, varying in intensity, thickest and sometimes confluent around the larger end, smaller and more scattered at the smaller end. Some of the eggs with brown ground are thickly blotched all over. A single egg in one set of four has the markings almost as fine as in A. bairdi, but the egg is larger and has not the characteristic
ruddy hue. All the eggs have the usual shell markings of pale purplish gray and light neutral tint.

"The eggs may be distinguished from those of the Buff-breasted Sandpiper, which they closely resemble, by their warmer color.

"Most of the eggs obtained were collected in 1883. The first nest was taken on June 20, a full set of eggs slightly incubated. Although eggs were found to contain large embryos as early as June 28, perfectly fresh eggs were found July 6, and the last eggs brought in, July 12, contained only small embryos."

Mr. E. W. Nelson, who also met with the Pectoral Sandpiper in Alaska, writes *:

"During my residence in the Territory, I found it an extremely common bird at the Yukon mouth, where the low, grassy flats afford it a much-frequented breeding-ground. . . . It arrives on the shores of Bering Sea, near Saint Michaels, from the 15th to the 25th of May; and after lingering about wet spots where the green herbage just begins to show among the universal browns of the tundra, they pair and seek their nesting places. It is a common but never very abundant bird during both migrations near Saint Michaels, but it is rare there during the breeding season. This is difficult to account for, as they are extremely common at the latter period on the low, flat islands in the Yukon delta, and are common also at other points on the coast. Dall found it at Plover Bay, East Siberia, and I found it common on the north coast of Siberia the last of July, 1881, where, like the Sharp-tailed Sandpiper, it was evidently upon its breeding ground. They arrive on the east coast of Bering Sea before the ground is entirely free from snow, and during September, in company with A. acuminata, are numerous about small, brackish pools, and the banks of tide creeks. October, with its frosty nights and raw, unpleasant days, soon thins their ranks until, by the 10th or 12th, the last one has gone.

"The last of May, 1879, I pitched my tent on a lonely island in the Yukon delta, and passed several weeks in almost continual physical discomfort owing to the cold rain and snow-storms which prevailed. However, I look back with pleasure upon the time passed here among the various water-fowl, when every day contributed new and strange experiences.

"The night of May 24 I lay wrapped in my blanket, and from the raised flap of the tent looked out over as dreary a cloud-covered landscape as can be imagined. The silence was unbroken save by the tinkle and clinking of the

* 'Report upon Natural History Collections made in Alaska between the years 1877 and 1881,' pp. 108, 109.
PECTORAL SANDPIPER.

disintegrating ice in the river, and at intervals by the wild notes of some restless loon, which arose in a hoarse reverberating cry and died away in a strange gurgling sound. As my eyelids began to droop and the scene to become indistinct, suddenly a low, hollow, booming note struck my ear and sent my thoughts back to a spring morning in Northern Illinois, and to the loud vibrating tones of the prairie chickens. Again the sound arose nearer and more distinct, and with an effort I brought myself back to the reality of my position and, resting upon one elbow, listened. A few seconds passed and again arose the note; a moment later and, gun in hand, I stood outside the tent. The open flat extended away on all sides, with apparently not a living creature near. Once again the note was repeated close by, and a glance revealed its author. Standing in the thin grasses 10 or 15 yards from me, with its throat inflated until it was as large as the rest of the bird, was a male *A. maculata*. The succeeding days afforded opportunity to observe the bird as it uttered its singular notes under a variety of situations and at various hours of the day or during the light Arctic night. The note is deep, hollow, and resonant, but at the same time liquid and musical, and may be represented by a repetition of the syllables *tōō-ū*, *tōŏ-ū*, *tōō-ū*, *tōō-ū*, *tōō-ū*, *tōō-ū*, *tōō-ū*. Before the bird utters these notes it fills its *œsophagus* with air to such an extent that the breast and throat is inflated to twice or more its natural size, and the great air-sac thus formed gives the peculiar resonant quality to the note.

"The skin of the throat and breast becomes very flabby and loose at this season, and its inner surface is covered with small globular masses of fat. When not inflated, the skin loaded with this extra weight and with a slight serous suffusion which is present hangs down in a pendulous flap or fold exactly like a dewlap, about an inch and a half wide. The *œsophagus* is very loose and becomes remarkably soft and distensible, but is easily ruptured in this state, as I found by dissection. In the plate accompanying this report, the extent and character of this inflation, unique at least among American waders, is shown. The bird may frequently be seen running along the ground close to the female, its enormous sac inflated, and its head drawn back and the bill pointing directly forward, or, filled with spring-time vigor, the bird flits with slow but energetic wing-strokes close along the ground, its head raised high over the shoulders and the tail hanging almost directly down. As it thus flies it utters a succession of the hollow booming notes, which have a strange ventriloquial quality. At times the male rises 20 or 30 yards in the air and inflating its throat glides down to the ground with its sac hanging below, as is shown in the accompanying plate. Again he crosses back and forth in front of the female, puffing his breast out and
bowing from side to side, running here and there, as if intoxicated with passion. Whenever he pursues his love-making, his rather low but pervading note swells and dies in musical cadences, which form a striking part of the great bird chorus heard at this season in the north.

"The Eskimo name indicates that its notes are like those of the walrus, hence the term 'walrus talker.' Since my return from the north my attention has been called to a note in the Proceedings of the Zoological Society of London (1859, p. 130), where it appears that Dr. Adams noted the peculiar habits of this bird years ago when he passed a season at Saint Michaels. These Sandpipers were beginning to nest when I left the Yukon mouth, and in one instance a female was seen engaged in preparing a place for her eggs in a tuft of grass, but the spot was afterwards abandoned."
PURPLE SANDPIPER.

Tringa striata, Lessonus

F. Poynting del.
**PURPLE SANDPIPER.**

*TRINGA STRIATA, LINNAEUS.*

**Explanation of Plate.**

Figure 1. Akureyri, Iceland, June 2, 1892. In collection of H. Massey, Esq.


This species is a regular winter visitor to the British Islands, a few examples being sometimes observed during the summer. It is supposed that it may have bred in our islands, but no identified eggs appear to have been obtained.

Referring to the geographical distribution of the Purple Sandpiper, Mr. Howard Saunders says *:—"This species breeds in considerable numbers no further off than the Faeroes, especially on Sandoe; while in Iceland, Greenland, Spitzbergen, Novaya Zemlya, and throughout the greater part of the Arctic regions, it is the most plentiful of its genus. Owing to the influence of the warm Gulf Stream, it is resident or only partially migratory on the coast of Norway, and is even found on the shores of Sweden during winter, though not common at any season far up the Baltic; while southward, we trace it on passage along the Atlantic sea-board down to Morocco. It may possibly nest high up in the mountains on some of the*

Azores, as Mr. Godman shot a male in full summer-plumage in June on Flores. In the Mediterranean it is of unusual occurrence, and M. Alléon has not met with it on the Black Sea. To the east of Novaya Zemlya the low tundras of Arctic Siberia are unsuited to its habits, and it is rare or very local until Bering Strait is reached. American ornithologists assert that the birds found in that region—inclusive of Alaska—belong to a distinct species, T. couesi, while yet a third, T. ptilocnemis, is restricted to the Prybilof Islands; Mr. Seebohm, however, has a Purple Sandpiper from the Kuril group. Its range in western Arctic America is, therefore, uncertain, but our bird undoubtedly breeds in the north-eastern portion, migrating in winter to the Great Lakes, Middle States and, exceptionally, to the Bermudas."

The late Mr. Wolley, referring to the breeding of this species in the Faeroes, says*:—"It breeds sparingly on the very tops of high mountains, where I found its young at the end of June still unable to fly. One pair, I remember particularly, was in the very midst of a colony of Skuas; they stood upon large stones in an easy attitude, but evidently watching our movements. From this spot I have now for two years had their eggs."

Colonel Feilden, who also found this species breeding in the Faeroes, writes†:—"Pairs of these interesting birds are to be found breeding throughout the islands, but they appear to be most abundant on Sandoe, from whence I received most of the eggs I procured. I only found one nest myself, and that was on the 20th of May, when walking over the fells between Thorshavn and Nordedhal. I almost placed my foot on the hen bird, which then fluttered off the nest, pretending to be broken-legged and winged; indeed the poor thing employed every artifice to draw our attention from her eggs: she succeeded in deceiving our guide, who ran after her and tried to catch her: I stopped the chase, which would otherwise have proved a long one, by shooting the bird. Returning to the nest I found four eggs lying in a little hollow scooped out of the scanty moss which clothed this alpine region; a few dried sprigs of moss composed the lining of the nest. The fells on this date were deep with snow in the sheltered spots, and the tops of the hills were white. The Purple Sandpiper was frequently seen by us along the shore, sometimes singly, often in company with others of its species, as well as with dunlins and turnstones, feeding at low tide on the small shells and

† ‘Zoologist,’ 1872, p. 3250.
animalcule left on the sea-weed. It is remarkably tame, and will allow a person to approach it within a few feet.”

Referring to the occurrence of this Sandpiper in summer in Shetland, the late Dr. Saxby writes *:—“A few pairs remain during the breeding season both near the marshes and upon the hills. I have never found the nest myself, but eggs have been brought me from the haunts of the birds exactly resembling authentic specimens of the egg of the Purple Sandpiper; they are longer than those of the Dunlin, and considerably broader, but very similarly coloured. Early in August I have shot first year’s birds upon the shore.”

Messrs. E. Evans and W. Sturge, in their “Notes on the Birds of Western Spitzbergen, as observed in 1855,” write as follows †:—“The Purple Sandpiper (Tringa maritima, Brünn.) was very abundant in Coal Bay (on the south side of Ice Sound, so named on account of a small quantity of poor coal being found there), and we found four of their nests on the high fjeld. Beautiful little nests they were, deep in the ground, and lined with stalks of grass and leaves of the Dwarf Birch (Betula nana, L.), containing mostly four eggs of an olive-green, handsomely mottled with purplish brown, chiefly at the larger end. We watched this elegant little bird—the only one of the Grallatores we saw—with much interest, as it waded into some pool of snow-water or ran along the shingle, every now and then raising its wings over its back and exhibiting the delicate tint of the under-side, at the same time uttering its loud shrill whistle.”

Mr. H. Seebohm writes ‡:—“The eggs of the Purple Sandpiper are four in number and remarkably handsome. They vary in ground-colour from pale olive to pale buffish brown, boldly mottled, blotched, and streaked with reddish brown and very dark blackish brown. On some eggs the blotches are large, and chiefly distributed in an oblique direction round the large end; on others they are more evenly distributed over the entire surface; and on many a few very dark scratches, spots, or streaks are scattered here and there amongst the brown markings. The underlying markings are numerous and conspicuous, and are pale violet-grey or greyish brown in colour. The eggs vary in length from 1·55 to 1·45 inch, and in breadth from 1·1 to 1·0 inch. It is almost impossible to distinguish some eggs of the Purple Sandpiper from certain varieties of those of the Jack Snipe or the Common Snipe; but on an average the ground-colour of the eggs of the two

* † ‡ 'Birds of Shetland,' p. 214.  
† 'Ibis,' 1859, p. 171.  
‡ 'History of British Birds,' vol. iii. pp. 194, 195.
latter species is less olive. Eggs of the Dunlin resemble very closely those of the Purple Sandpiper, but are smaller."

Mr. H. E. Dresser states that he possesses a considerable series of eggs of this species, obtained from Greenland and the Faroes, the measurements of which vary from 1·52 by 1·1 inch to 1·4 by 1 inch.*

* 'History of the Birds of Europe,' vol. viii. p. 75.
BUFF-BREASTED SANDPIPER.
Tryngites rufescens (Vieill.).

1. Ridgway del.
BUFF-BREASTED SANDPIPER.

Scolopacidae.] TRYNGITES RUFESCENS (Vieillot).

EXPLANATION OF PLATE.

Figure 1. Point Barrow, Alaska, July 3, 1883; Maxfield and Guzman coll. No. 18993
U.S. National Museum Collection.

2. Point Barrow, Alaska, July 3, 1883; Maxfield and Guzman coll. No. 18995
U.S. National Museum Collection.

3. Point Barrow, Alaska, July 3, 1883; Maxfield and Guzman coll. No. 18995
U.S. National Museum Collection.

4. Point Barrow, Alaska, June 20, 1883; J. Murdoch coll. No. 18991
U.S. National Museum Collection.

5. Point Barrow, Alaska, June 18, 1883; native collector. No. 18990
U.S. National Museum Collection.

6. Point Barrow, Alaska, June 22, 1883; native collector. No. 18994
U.S. National Museum Collection.

This American Sandpiper is a rare accidental visitor, there being about a
dozen records of its occurrence in England, and one in Ireland.

Referring to the geographical distribution of this species, Mr. Howard Saunders
writes as follows*: "In summer the Buff-breasted Sandpiper inhabits the Arctic
and sub-Arctic portions of the American continent. A female obtained by Dr. Rae
on June 14th at Repulse Bay, in the south of Melville Peninsula, is in the British
Museum, as are also examples from Fort Simpson; many sets of eggs were taken
by Mr. MacFarlane on the barren-grounds of the Anderson River district, and
Mr. Murdoch met with this species nesting plentifully at Point Barrow in Northern
Alaska, though on the Yukon and southwards to Sitka it appears to be uncommon.
Mr. E. W. Nelson found it rather numerous on August 1st 1880 on the north
coast of Siberia to the west of Koliuchin Bay, and says that the birds were
evidently on their breeding-grounds there; while Dr. von Middendorff has
recorded an example from the Sea of Okhotsk, shot on June 30th. On migration

it is found throughout the United States, though irregularly and rather sparsely in the north-east; becoming more plentiful in Louisiana (where the specimen which Vieillot described was obtained), and thence southward to Mexico. It visits the Bermudas, Cuba, Trinidad, and probably other islands in the West Indies, passing the winter in South America down the Río de la Plata."

Mr. R. MacFarlane gives the following notes respecting the Buff-breasted Sandpiper * :—"This species is common in the Barren Grounds east of Horton River and on the Arctic coast. Between the 26th of June and the 9th of July upwards of twenty sets of eggs were secured, and there were four in every nest, which was a mere depression in the soil, scantily lined with a few withered leaves and dried grasses. When the nest was approached the female parent usually made a low flight to a short distance."

Dr. Coues describes the eggs of this species as follows † :—"Of the very rare and scarcely known eggs of the Buff-breasted Sandpiper I have examined about a dozen sets in the Smithsonian, all collected by Mr. MacFarlane in the Anderson River region and along the Arctic coast to the eastward. They are very pointedly pyriform. The following measurements indicate the size, shape, and limits of variation: 1·50 by 1·03; 1·48 by 1·10; 1·45 by 1·02; 1·40 by 1·04. The ground is clay, sometimes with a slight olivaceous or drab shade, oftener with a clear grayish cast, of rather peculiar shade. The markings are extremely bold and sharp, though not heavier than usual. Taking a specimen in which the markings are most distinct, we find heavy blotches and spots of indeterminate size and shape all over the egg, but largest and most numerous on the major half of the egg, of rich umber-brown, deeper or lighter according to the quantity of pigment. Nearest these blotched varieties come the splashed ones, in which the markings mass more heavily about the larger end, and are elsewhere splattered over in rather small markings. This is the more frequent pattern; and in some cases the splashing hides the ground-color at the large end. Other examples are spotted with rather narrow markings that seem to radiate from the large end, becoming largest and thickest around the greatest diameter of the egg, and being much smaller elsewhere. All the eggs have the usual neutral or stone-grey shell-markings, and in most of them there are at the large end a few spots or scrawls of blackish over all the other markings. According to the labels, the nidification is not peculiar, the nest being a slight depression of the ground, lined with a few dried grasses or leaves. The eggs are four in a majority of instances."

† 'Birds of the North-West,' p. 507.
BUFF-BREASTED SANDPIPER.

Mr. John Murdoch gives the following details respecting the breeding habits of this Sandpiper, as observed by him at Point Barrow, Alaska *:—"This is an abundant summer resident, and was more plentiful in the season of 1883 than it was the year before.

"They arrived both seasons in a body at about the same date (June 6 to 8), and were first seen on the dry banks below the village feeding greedily on the flies and beetles which were out sunning themselves.

"By the middle of June they had spread pretty well over the dryer parts of the tundra, both above and below the station. They were never seen on the lower marshy portions of the tundra, but always confined themselves to the high and dry banks, or what we called the black tundra.

"The eggs, as might be inferred from their colors, are laid in the latter locality, as a rule, where they harmonize very well with the black and white of the ground and moss. We were unable to find the nest in 1882, but the next spring we collected the eggs in considerable abundance. Like the rest of the waders they build no nest, but deposit the four eggs, small end down, in a shallow depression in the ground lined with a little moss. Four is the usual number of eggs in a complete set, though we collected one set of five.

"During the greater part of the breeding season, that is, from the time they arrive till the end of June, the males indulge in curious antics, which we had frequent opportunity of observing.

"A favorite trick is to walk along with one wing stretched to its fullest extent and held high in the air. I have frequently seen solitary birds doing this apparently for their own amusement, when they had no spectators of their own kind. Two will occasionally meet and 'spar' like fighting cocks for a few minutes, and then rise together like 'towering' birds, with legs hanging loose, for about thirty feet, then drifting off to leeward. A single bird will sometimes stretch himself up to his full height, spread his wings forward, and puff out his throat, making a sort of clucking noise, while one or two others stand by and apparently admire him. They are very silent, even during the breeding season. When they first arrive they are to be found associating with Actodromas maculata for a few days. After the breeding season they disappear gradually, never gathering into flocks, but quietly slipping away, and none are to be seen after the first week in August."

BARTRAM'S SANDPIPER.
Bartramia longicauda (Becklem).
BARTRAM'S SANDPIPER.

SCOLOPACIDÆ.

BARTRAMIA LONGICAUDA (BECHSTEIN).

EXPLANATION OF PLATE.

<table>
<thead>
<tr>
<th>Figure</th>
<th>Location</th>
<th>Date</th>
<th>Collector</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>South Dakota, U.S.A.</td>
<td>June 3, 1892</td>
<td>H. Massey, Esq.</td>
</tr>
<tr>
<td>2</td>
<td>Ditto</td>
<td>June 1, 1890</td>
<td>Ditto</td>
</tr>
<tr>
<td>3</td>
<td>Ditto</td>
<td>May 26, 1889</td>
<td>Ditto</td>
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<tr>
<td>4</td>
<td>Ditto</td>
<td>June 1, 1890</td>
<td>Ditto</td>
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<tr>
<td>5</td>
<td>Ditto</td>
<td>May 30, 1891</td>
<td>Ditto</td>
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</tbody>
</table>

This American Sandpiper is a rare accidental visitor, there being a few records of its occurrence in England and one in Ireland.

Dr. Coues writes*:—"Bartram's Tattler, or the 'Upland Plover,' as it is generally called by sportsmen, is a bird of wide and general dispersion in the Western Hemisphere, while its casual occurrence in Europe is attested, and it is even stated to have been found in Australia. It inhabits at different seasons nearly all of North America, and in winter pushes its migration even to Central and South America, as well as into the West Indies. But it has not, to my knowledge, been found in the United States west of the Rocky Mountains. It occurs in summer as far north as the Yukon, though thousands of the birds also breed within the limits of the United States.

"On its presence and movements in the East I have made few observations, and know nothing beyond the general items familiar to all sportsmen who, with good reason, consider the Upland Plover, or Grass Plover, as a prime game bird, wild and difficult to secure, best hunted from a carriage, and capital for the table. It is said to breed from the middle districts, as in Illinois and Pennsylvania, northward. The principal shooting is done in August and September, as the birds move southward by the end of the latter month.

"In most parts of the West, between the Mississippi and the Rocky Mountains, this Tattler, commonly known as the 'Prairie Pigeon,' is exceedingly abundant during the migrations—more so than I can suppose it to be in settled

* 'Birds of the North-West,' pp. 503–505.
portions of the country. In Texas, I am told, it occurs in flocks 'of thousands.' In Kansas, during the month of May, it migrates in great numbers, being scattered over the prairies everywhere, and it is so tame that it may be destroyed without the slightest artifice; I have seen it just escape being caught with the crack of a coach-whip. Passing northward, it enters Dakota, Iowa, and Minnesota the same month. About the middle of May it reaches the latitude of Fort Randall, with great numbers of Golden Plover and Esquimaux Curlew, flecking the prairies everywhere. Its breeding habits may be studied with perfect success in Northern Dakota, where it is the most abundant of all the waders. We can scarcely cross a piece of prairie, or travel a mile along the roads anywhere, without seeing it. Its gentle and unsuspicous ways, its slender and graceful shape, and the beauty of its markings, are all alike attractive, while the excellence of its flesh is another point not less interesting, but less favorable for the bird. Too many are destroyed at this season when they are pairing, for few can resist the tempting shots, as the birds step along the road-side or stand erect in the scanty grass, gazing at the passing vehicle with misplaced confidence. By the end of May those that are to breed further north have passed on, while the remainder have paired and are about to nest.

"As soon as they are mated the pairs keep close company, being rarely beyond each other's call, and are oftenest seen rambling together through the grass. At such times they seem very slender, as indeed they are, overtopping the scanty herbage with their long, thin necks, swaying continually in graceful motion. Their ordinary note at this, as at other seasons, is a long-drawn, soft, mellow whistle, of a peculiarly clear, resonant quality; but besides this, they have a note peculiar, I believe, to this period of their lives. This is a very loud, prolonged cry, sounding more like the whistling of the wind than a bird's voice; the wild sound, which is strangely mournful, is generally uttered when the bird, just alighted, holds its wings for a moment perpendicularly, before adjusting them over its back. It is frequently heard in the night, all through the breeding season, and is, I think, one of the most remarkable utteries I ever heard. There is yet another note that the Tattler utters, chiefly when disturbed breeding; this is a harsh scream, quickly and often repeated, much like that given by other waders under the same circumstances.

"In Northern Dakota the eggs are mostly laid by the second week in June; the time is quite constant; and, so far as I know, only one brood is raised each year. The nest, like that of other birds breeding on the open prairie, is hard to find, as there is nothing whatever to guide a search, and the herbage of the prairie, flimsy as it usually is at this season, is sufficient to hide the variegated
eggs which assimilate with the colors of their surroundings. The nesting is quite similar to that of the Curlews and Godwits. I have found nests on the open prairie without landmarks; but, perhaps, oftener they are placed in the vicinity of pools and sloughs, or along the edge of a piece of woods—always, however, in an open spot. The female is a close setter, and will suffer herself to be almost trodden upon before she will quit her charge—indeed nests are oftenest found by the fluttering of the female from under one's feet. Early in incubation she generally flies to a little distance and realights, walking leisurely about the grass; but if the eggs be far advanced she is more solicitous, and will feign lameness, in hope of drawing attention from the nest. The male soon joins her, and the pair hover low off the ground, flying slowly around with incurved wings, uttering their cries of distress; and as several pairs are usually nesting within hearing, they, too, become alarmed, and the general clamour is continued until the intruder withdraws. The scene is much the same as when the breeding places of the Curlews, Willets, or Godwits are invaded.

"The nest is flimsy—merely a few straws to keep the eggs from the ground, in a slight depression. The eggs are ordinarily four in number, as usual among Waders. The numerous specimens I have collected are somewhat notably constant in characters, both of size and coloration. In dimensions they range from 1:90 by 1:30 inches, to 1:70 by 1:25, averaging about 1:75 by 1:28. . . .

"Young birds are abroad late in June—curious little creatures, timid and weak, led about by their anxious parents, solicitous for their welfare, and ready to engage in the most unequal contests in their behalf. When halfgrown, but still in the down, the little creatures have a curiously clumsy, top-heavy look; their legs look disproportionately large, like those of a young colt or calf; and they may be caught with little difficulty, as they do not run very well. I once happened upon a brood, perhaps two weeks old, rambling with their mother over the prairie. She sounded the alarm, to scatter her brood, but not before I had secured one of them in my hand. I never saw a braver defence attempted than was made by this strong-hearted though powerless bird, who, after exhausting her artifices to draw me in pursuit of herself, by tumbling about as if desperately wounded, and lying panting with out-stretched wings on the grass, gave up hope of saving her young in this way, and then almost attacked me, dashing close up and retreating again to renew her useless onslaught. She was evidently incited to unusual courage by the sight of her little one struggling in my hand. At this downy stage the young birds are white below, finely mottled with black, white, and rich brown above; the feet and under mandible are light coloured; the upper mandible is blackish.
"Although these Tattlers are generally dispersed over the prairies during the summer, yet they affect particular spots by preference. Away from the river valleys, such spots are the numerous depressions of rolling prairie, often of great extent, which are moist or even watery at some seasons, and where the vegetation is most luxuriant. Here they gather almost into colonies. Riding into some such spot in July, when the young birds are being led about by their parents, some old bird more watchful than the rest, or nearest to the person approaching, gives the alarm with a loud outcry, the young scatter and hide, and all the old birds are soon on wing; hovering in the air, often at a great height, crossing each other's path, and ceaselessly vociferating their displeasure. I have often seen a dozen or twenty overhead at once, all from a little spot only a few acres in extent. Later in the season, when all the summer's broods are on wing, they make up into flocks, often of great extent, and old and young together assume the ordinary routine of their lives. They leave these northern regions early. I saw none after the forepart of September."

The late Dr. T. M. Brewer writes *:—"The usual call-note of the Upland Plover, when undisturbed, especially during the breeding-season, is a prolonged and peculiarly soft whistle. This is clear and resonant, and to those familiar with it is readily distinguished from any other. The call-notes vary somewhat in their character, and change as the season progresses, and may be heard during the night when the young brood has appeared. These notes change yet more, and become intensified signals of alarm, when the young are threatened by danger. But under any and all circumstances these cries are peculiar to the species, and are unlike those of any of its tribe.

"In Pennsylvania the eggs are hatched out early in June; and there, as elsewhere, only a single brood is raised in one season. The nest is always placed in an open situation; but, notwithstanding this circumstance, it is not easily found without the aid of a good dog trained for the purpose. In 1843, in company with my friend Baird, I searched in vain an open ploughed field for the nest of a pair we knew must be near. Its site was not found until after the young had gone—only a few days after our first search—the empty egg-shells showing where in the open field it was. The female must have kept closely to the nest, even when we were near her, while her mate was doing his best to delude us. The young are singularly beautiful little balls of soft down, a mottling of white, brown, and black. They are cared for by their parents until nearly grown, and from the shell instinctively hide themselves at the approach of danger. The eggs of this

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* 'Water Birds of North America,' vol. i. pp. 299, 300.
species—always four in number—vary in length from 1.79 to 1.86 inches, and in breadth from 1.35 to 1.44 inches. Their ground-color is usually a deep pinkish drab, and over this are distributed small roundish spottings of a burnt-sienna tint. These are rather sparsely scattered over the smaller end of the egg, but become more densely aggregated about the larger portion. In others the ground-color is more of a cream-colored drab, without any perceptible shading of pink. In a few the ground is a pale pearly-white color, with a faint shading of cream-color. In these the markings are usually blotches of various shades of a purplish slate, much scattered, and overlain by spottings of a deep sepia, which become confluent at the greater end. The shape of the eggs is a slightly rounded oval, strongly tapering at one end and rounded at the other; their number is uniformly four."
GREEN SANDPIPER.
Totanus ochropus (Linnaeus).

P. Roytung del
GREEN SANDPIPER.

Scolopacidae.]
TOTANUS OCHROPUS (Linnæus).

EXPLANATION OF PLATE.

Figure 1. Sweden, June 1, 1883. In collection of Dr. R. Williams.
,, 4. Sweden, June 1, 1883. In collection of Dr. R. Williams.

The Green Sandpiper is an irregular spring and autumn migrant to the British Islands. Pairs of these birds have been observed in this country in the summer months; and, from evidence forthcoming, it is very probable that they may have bred with us, but as yet no proof of this has been obtained.

With reference to the Green Sandpiper, Mr. Howard Saunders writes as follows*:

"This species is found nesting in marshy woods, from the vicinity of the Arctic circle southward to Central Russia, Poland and Germany, and reaching as far west as Holstein; while over the rest of the Continent it is well known as a migrant, and I have an adult female from Málaga, in the south of Spain, shot as late as June 24th. From autumn to spring it is abundant in suitable localities from Morocco to Egypt; and, though not traced beyond Angola on the west side of Africa, it ascends the Nile valley to Abyssinia, continuing its course through the lake district to Cape Colony. In summer it is found throughout Asia from the Arctic circle to the great mountain ranges, while from July onwards it visits the rest of that continent down to Burma.

* 'Manual of British Birds,' pp. 595, 596.
"The remarkable deviation of the Green Sandpiper from the nesting-habits of other waders was first brought before the notice of the majority of British readers by Prof. Newton (P. Z. S. 1863, pp. 529-532); but an intimation of its preference for trees had been given in 'Naumannia' for 1851-52, and Forester Hintz had communicated full details (J. f. O. 1862, p. 460) respecting its nidification as observed in Pomerania from 1818."

Mr. H. E. Dresser has published an excellent account of the nidification of the Green Sandpiper as observed by Forester W. Hintz in Pomerania. Mr. Dresser writes*:-"The Rev. Herbert S. Hawkins has placed at my disposal a letter from Mr. Hintz respecting the nidification of the present species, from which I translate the following:-"The bird arrives here in pairs from the beginning to the middle of April, and selects for the purpose of nidification wooded localities close to ponds, from which it makes excursions to marshy lakes or rivers at some distance. It usually deposits its eggs in old deserted nests of the Blackbird and Missel-Thrush; but I have on one occasion taken eggs out of a nest of the latter species which had been left by the young Thrushes only six days previously. It also not unfrequently uses the same nest two years in succession. I have found its eggs in old half-ruined nests of Woodpigeons, Jays, and even in those of the squirrel, on the ground, on the moss, on old stumps with only a few leaves under the eggs, and on one occasion on the branches of an old pine tree in a place where the spines were heaped together, and once even in the hollow of an aspen tree where a Starling had previously bred, the tree having fallen and the opening of the hole being upwards. Formerly I used always to look for the nests of the Green Sandpiper low down, and usually found them from 3 to 12 feet above the ground; but of late years I have taken eggs as high up as 35 feet. The bird always nests close to ponds where even in summer there is some little water; and only on two occasions have I found the nest as far distant from the water as 20 to 30 paces. As soon as the young are hatched they jump down to the ground. The present species breeds early, often in the middle of April, usually in May, or, if the eggs are taken, in June, the second lot of eggs being occasionally, though not often, deposited in the same nest." Borggreve states that Mr. Hintz once found seven eggs of this species in an old Thrush's nest at Neustadt Eberswald; and he surmises that two females must have laid in the same nest, which I think most probable."

The late Mr. H. W. Wheelwright, describing the nesting habits of this

* 'History of the Birds of Europe,' vol. viii, p. 141.
species as observed by him in Sweden, says*:—"Now of all our waders this is the noisiest, and there is little trouble in finding the locality where it breeds, for the old male is always about some brook in the neighbourhood, and I have before noticed that the loud wild cry of the Green Sandpiper and Greenshank are much alike. . . . In Sweden the Green Sandpiper never makes a nest on the ground, like the rest of its congeners, but invariably lays its four pyriform large eggs—of a very light ground colour, spotted all over, sparingly towards the small end (at the top the spots are much larger, darker, and crowded together), with two shades of purple and umber brown—in an old deserted nest of a squirrel, jay, or crow (I once, however, saw them in a new common thrush's nest), in the forest, often far from water, always in a fir tree, sometimes forty feet from the ground. How the old bird takes her young down to the ground I cannot say, but I once found four very small young ones, apparently not a day old, at the foot of a fir, and in the nest I found shells of the eggs still wet inside."

The late Mr. E. T. Booth met with this Sandpiper in Yorkshire in the month of June, under circumstances which pointed to the strong probability of its breeding there. He writes †:—"The furthest north that I met with this Sandpiper was in the valley of the Esk, a few miles inland from Whitby in Yorkshire; parts of the wild glen through which the river flows towards the North Sea were densely wooded, and these proved to be favourite resorts of the birds. When alarmed they frequently appeared to fly out from the upper branches of some of the larger trees; being, however, at that time unacquainted with the breeding-habits of this species, I made no attempt to search for any nests in which their eggs or young might be concealed. These observations were taken early in June 1862, the time of year at which the birds might naturally be supposed to be engaged in breeding-operations."

Mr. H. Seebohm gives the following description of the eggs of this species‡:—"Four is the full clutch of eggs, which vary in ground-colour from creamy white to white with the faintest tinge of olive on the one hand, and to very pale reddish brown on the other. The surface-spots are dark reddish brown, generally most numerous on the large end of the egg, and seldom larger than no. 4 shot; the underlying markings are similar in size and distribution, but are pale greyish brown in colour. They vary in length from 1.6 to 1.5 inch, and in

* 'Ten Years in Sweden,' by "An Old Bushman," p. 373.
† 'Rough Notes on Birds observed in the British Islands,' vol. ii.
‡ 'History of British Birds,' vol. iii. p. 128.
breadth from 1·15 to 1·05 inch. In general appearance they most nearly resemble eggs of Bartram’s Sandpiper and the Common Sandpiper, between which they are intermediate in size.”

Mr. H. E. Dresser says that the measurements of three clutches of eggs in his collection, obtained from Pomerania, vary from 1·6 by 1·15 inch to 1·47 by 1·1 inch.*

SPOTTED REDSHANK.
Totanus fuscus (Limicola).
SPOTTED REDSHANK.

TOTANUS FUSCUS (LINNÆUS).

Explanation of Plate.

Figure 1. Tornea Lappmark, June 11, 1891.
   2. Ditto         June 1, 1893.
   3. Ditto         June 8, 1891.
   4. Ditto         June 12, 1892.
   5. Lapland,      June 11, 1886.
   7. Ditto.
   8. Lapland,      June 13, 1881.
   9. Kittila, Finland, June 8, 1888.
   10. Lapland, June 12, 1885.
   11. Lapland, June 19, 1891.
   12. Ditto.

In collection of H. Massey, Esq.
In collection of Dr. R. Williams.
In collection of H. Massey, Esq.
In collection of Dr. R. Williams.

The Spotted Redshank is an irregular spring and autumn migrant to the British Islands.

Mr. Howard Saunders writes as follows, respecting the geographical distribution of this species *:—"In summer this species inhabits the northern portions of Scandinavia and Russia; the birds which intend to nest there arriving in May, though migrants have been noticed passing northwards over Heligoland as late as June 17th. It crosses the Continent by several routes, its winter quarters commencing in the basin of the Mediterranean and extending to Cape Colony. In Asiatic Siberia it is somewhat irregularly distributed, but Dr. von Middendorff found it breeding on the Boganida, while eastward it ranges to Kamschatka; and during the cold season it visits Japan, China, Burma, India, &c."

Mr. H. E. Dresser writes †:—"I am indebted to Professor Newton for the loan of a letter, addressed to Mr. Hewitson, under date 17th October, 1854, by Mr. Wolley, who, without taking any credit to himself for being, as he certainly

was, the first ornithologist to discover the eggs of this Wader, modestly announces his discovery as follows:—

"I expect that henceforth the Spotted Redshank will always start up in my memory at the first mention of Lapland. It is so peculiar to the country, so remarkable in its appearance in summer, and so often calling attention to itself by its striking actions—whilst my ignorance of its nest and eggs for a whole year after my arrival in the far north kept up in me during that time the liveliest interest concerning it. A bird with so much character was easy to talk about. I soon found that it was known amongst the people by several names, all more or less expressive; and in my drives about Finland and into Norway during the winter I had heard from so many quarters accounts of its nesting-peculiarities, that I only waited for its return here to see them confirmed. It does not keep one long in suspense. It comes as soon as the snow is off the ground, and lays its eggs with very little delay. At this time one may hear a singular call in the marshes, which the Finns express by the sound reeval, corresponding to a word in their language meaning an evil spirit; and one of the names of the bird is taken from it—a name always spoken with a spiteful emphasis by Reindeer-stalkers; for this 'Rivättn' is as mischievous to them as a Grey Crow is to a Highland forester, or a Gull to a seal-shooter. But the cry with which it spoils their sport is tjouty; and from this another name is derived, generally coupled with the distinctive epithet corresponding to black; or with one meaning burnt wood; but whether this last is taken from the colour of the bird, or from a common place of resort for it, or from both, I am not sure. Certain it is that this black bird not unfrequently lays its eggs in a part of the forest which has formerly been burnt; and here is one of its most unexpected singularities—a marsh-bird choosing the driest possible situation, even hills of considerable height, and covered with forest-timber. I have myself seen two nests so placed; and one of them at least was on ground which, from the charred wood lying about, had evidently been burnt at some former period. They were nearly at the top of long hills, many hundreds of yards from any marshy places, good-sized fir trees on all sides; but they were not in the thickest parts of the forests, and the vegetation on the ground about was very scanty, diminutive heather and such like plants growing thinly amongst reindeer lichen in slight depressions on the ground—placed near some little ancient logs, so nearly buried, however, as to afford no shelter, the bedding only a few dry leaves of the Scotch fir. The bird sits sometimes so close that one is tempted to try to catch it in the hand, its white back conspicuous as it crouches with its neck drawn in. It either gets up direct or runs a short way before it rises; and then it flies round with an occasional tjouty, or stands upon the top of
SPOTTED REDSHANK.

a neighbouring tree, showing the full length of its slender legs, neck, and bill. But it is not till it has young that all its powers of eloquence are fully brought into play: it then comes far to meet any intruder, floating over him with a clear cry that echoes through the forest, or that is heard over a great extent of marsh, or it stands very near one, bowing its head, opening its beak quite wide in the energy of its gesticulations. The eggs, four in number, are of a rich green ground-colour when fresh, or sometimes of a bright brown. This year they were laid hereabouts at the end of May. The young are probably carried into marshy land as soon as they are hatched; for there they are whilst they are still very small. I am told that dry mounds rising out of swamps are sometimes chosen as breeding-places. The nests I have described were found quite by good luck, stumbled upon in walking through the forest, where the bird is scattered usually at rather wide intervals; one may see two or three pairs in the course of a long day's walk. It is so wary that I have never succeeded in watching it to its nest.'"

Mr. H. Seebohm describes the eggs of this species as follows*:—"The eggs of the Dusky Redshank are four in number, and are laid late in May or during the first half of June, sometimes later, according to season; they are very handsome, and vary in ground-colour from pale green to pale brown, heavily blotched and spotted with rich sepia-brown, and with underlying markings of violet-grey and brownish grey. On many eggs a few very dark brown hair-like lines and scratches occur on the large end. Some eggs are so richly marked as to hide almost all the large end; others are more evenly spotted over the entire surface. The markings are generally bold and very clearly defined. The eggs are pyriform in shape, and vary in length from 1·95 to 1·8 inch, and in breadth from 1·35 to 1·25 inch. They cannot readily be confused with those of any other British bird. Eggs of the Great Snipe perhaps resemble them most closely, but they are never so green, and are, on an average, slightly smaller."

Mr. H. E. Dresser states that the measurements of a series of twenty eggs of this species in his collection, obtained in Lapland, vary from 1·95 by 1·27 inch to 1·8 by 1·22 inch.†

* 'History of British Birds,' vol. iii. p. 147.
† 'History of the Birds of Europe,' vol. viii. p. 172.
PROSPECTUS.

This work will illustrate all the known eggs of British Birds comprised in the Order Limicola, which includes the Plovers, Snipes, Sandpipers, &c.

In order to adequately figure the interesting varieties of eggs of this order of birds, about 54 Plates will be required, i.e. at least one Plate for each species.

The authorities of the U.S. National Museum, Washington, with their characteristic generosity, have permitted drawings to be made by Mr. J. L. Ridgway from their unique series of rare eggs specially for this volume.

The remaining drawings, chiefly by the Author, and executed with the greatest care and fidelity to nature, have been made from authentic specimens in our own Natural History Museum, South Kensington, and in various private collections.

Recognizing the importance of utilizing the highest class of chromolithography to faithfully delineate Birds' Eggs, the Author has entrusted the reproduction of the original drawings to the justly celebrated firm of W. Greve, Berlin, believing that portraits of eggs will thus be presented to the public which, in point of truth and delicacy of finish, have hitherto been unequalled.

Judges of genuine chromo-lithography will be able to test, from an examination of the Plates herein contained, whether or not this belief as to quality is justified by results. The impressions, limited to 300, will be taken by handpress work, which is without doubt much superior to the best class of steampress work.

The letterpress will give ample details (where known) respecting the nidification of each species; and with a view to giving an "open-air" or "field" character to his text, the Author has mainly quoted those authorities who write from personal observation.

The work will be completed in Four Parts, and only 250 copies will be available for Subscribers.

The price of the complete work to those Subscribers who pay on the issue of Part I. will be Four Guineas net, or Twenty-five Shillings net per Part if the same are paid for as issued. No separate Parts will be sold, as Subscribers' names are only received for the entire work.

A List of Subscribers' names will be issued with the concluding Part.

The Plates all being far advanced towards completion, it is reasonably expected that the four Parts will be issued before April 1896.

Part IV. will contain extra Plates of Eggs of Grey Plover and Little Stint, taken this year (July 1895) on Kolguev Island by Messrs. Henry J. and Charles E. Pearson.
EGGS OF BRITISH BIRDS.

LIMICOLÆ.
(PLOVERS, SNIPES, SANDPIPERS, &c.).

BY
FRANK POYNTING.

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Eastern Golden Plover (Charadrius fulvus).
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Price £1. 5s. net.
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Cursorius gallicus (J. F. Omeis).
CREAM-COLOURED COURSER.
CHARADRIIDÆ.]
CURSORIUS GALLICUS (J. F. Gmelin).

EXPLANATION OF PLATE.

Figure 1. Fuerteventura, Canary Islands, March, 1891.

,, 2. Ditto. Ditto. March 5, 1889. In collection of

This species is an accidental visitor, about twenty examples having been obtained in Great Britain. There is no record from Ireland.

Referring to this species, Mr. H. Saunders says*:—"In the west its true home commences at the Canary Islands, on some of which, especially Fuerteventura, the bird is fairly numerous; while eastward it inhabits Africa north of the Sahara—where Canon Tristram obtained the first eggs on record, and southward it is found in Kordofan, as well as on both sides of the Red Sea. Through Arabia we follow it to Persia, Baluchistan, Northern India, and Afghanistan."

Mr. A. O. Hume writes†:—"I believe that the first really authentic eggs of the Cream-coloured Courser ever obtained were those procured for me in 1868 by Khan Nizam-ood-deen Khan, the well-known Punjab sportsman, in the neighbourhood of Urneewalla in the western portion of the Sirsa District."

After quoting the notes he had previously published on the subject, detailing the circumstances under which he had received these eggs from the Khan, Mr. Hume continues:—"Since this appeared, the Khan Sahib has taken nearly one hundred eggs of this species, and I have myself visited his domains and taken more than a dozen with my own hands. . . . . . . July was the month in which I found them, and it is in this month generally that the great bulk are found; but the Khan has taken them from the middle of March to the middle of

* 'Manual of British Birds,' p. 520.
† 'Nests and Eggs of Indian Birds,' 2nd ed. vol. iii. pp. 325-327.
CHARADRIIDÆ.

August, and the laying-season varies a good deal according to the rains." According to the Khan Sahib's diary, quoted by Mr. Hume, the nests were found amongst stubble, on waste and cultivated land, amongst grass, in scrub-jungle, &c. Mr. Hume continues:—"The nests, he tells me, have always been small hollows, 3 to 5 inches in diameter and at most 2 inches in depth; generally bare, at times with a slight lining of dry grass, which may have been placed there by the bird or may have lodged there accidentally. Three is the greatest number he has yet found in any nest, and this only exceptionally. Two he considers to be the usual complement. . . . The eggs vary very much in size, from 1·1 to 1·28 in length, and from 0·9 to 1·04 in breadth; but the average of fifty eggs carefully measured is 1·2 by 0·96."

I have examined 24 clutches of eggs of this species, kindly lent me for the purpose by Mr. H. W. Marsden, of 40 Triangle (West), Clifton, Bristol. Each clutch consisted of two eggs, and they were all obtained on the island of Fuerteventura, Canary Islands, in February 1891. They vary in ground-colour from pale creamy buff to light stone-buff, and are mostly thickly freckled with minute "niggling" spots and streaks of brown of varying intensity, sometimes distinct, but generally ill-defined. On some eggs the markings are not so close and reveal the ground-colour plainly, whilst on others these are so close as to almost hide it. Sometimes the darker markings are clustered thickly round the larger half of the egg so as to form a zone. Occasionally the markings take the form of small ill-defined patches or clouds of brown colour. Nearly all the eggs have small faint underlying patches or streaks of bluish grey. These 48 eggs varied in length from 1·52 to 1·23 inch, and in breadth from 1·15 to 1·0 inch, averaging 1·37 by 1·07 inch. The eggs obtained in India by Mr. Hume are smaller and darker than those described above.

Mr. E. G. Meade-Waldo, referring to a visit to Fuerteventura (Canary Islands) in 1888, writes*:—"The Cream-coloured Courser (Cursorius gallicus) was fairly numerous and breeding; it seemed to prefer the barest parts of the desert, where the stones were mostly small. It had bred very early, for on the 23rd of March I saw a young bird almost able to fly, and also found a small young one. The old birds did not make any fuss when I was close to their young or eggs, simply running away and, when I approached, going a little further, generally creeping about 50 yards off. The eggs were very difficult to find, the only guide to their whereabouts being the scratches made by the old birds before finally fixing on a suitable place to lay."

* "Notes on some Birds of the Canary Islands," 'Ibis,' 1889, p. 11.
Referring to a further visit to the Island of Fuerteventura in February 1889, Mr. Meade-Waldo writes*:—"I think I got on a little better this year at finding the nests of Cursorius gallicus, but they certainly are very difficult to discover. This is caused by the perfectly open country, the bird being of the same colour as the ground and never flying or betraying uneasiness, and the eggs being exactly like the stones that cover the plain. There is really no nest, the bigger stones being just moved away to make room for the bird to sit on the two eggs. I had promised Mr. Sharpe to get him a pair, with the eggs and ground on which the eggs had been laid, for a case in the Natural History Museum. Two or three days after our arrival a goatherd said he knew of one, and offered to show it to us. It seemed very wonderful how he could walk about three miles over ground, without any landmark to speak of, to two eggs that he had seen a few days before and thought no more about, never dreaming anyone could want them; however, he took us straight to them. This man did not know, until I spoke to him, that I was after eggs of any kind. I shot the hen, and proceeded to mark out the ground for removing, when the man, wondering what on earth we were at, walked up and put his foot on the two eggs!! This was singularly annoying, and we were eight days before we found another nest, and had almost begun to despair of ever getting one. However, eight days after this misfortune I got a nest, eggs, and parent, and also a pair of beautiful little young; the young are much easier to find than the eggs. The hen only remains at the nest whilst she is sitting, the cocks either go about in little parties or mix with birds which are not breeding. When the young are hatched, however, both parents care for them, the male being rather shier than the hen. While running about, it is easy to tell the cock from the hen; he carries himself much higher and seems to have a bigger head; when shot this difference vanishes. The males breed in their first year, as two I shot were in partly spotted plumage; nevertheless many do not breed at all, and I saw flocks of from fifteen to forty birds whilst others had eggs or small young. In flocks they were very wild, and reminded one generally of Lapwings; they skim a great deal with outstretched motionless wings. Their voice is a low qua qua when they have young.

* "Further Notes on the Birds of the Canary Islands," 'Ibis,' 1889, pp. 505, 506.
think I should have done so, had it not been that they wanted almost ceaseless
attention, and I could not spare the time. They ate flies, small snails, and
cochineal-bugs, also small pieces of lizard. They ran at a great rate, holding
themselves very upright, with their wings stretched out wide. I, greatly
against my inclination, converted them into skins. I think they were about five
days' old.

"The eggs of both Courser and Bustard vary greatly in size and colour; the
Courser seems never to lay more than two."

In his "List of Birds observed in the Canary Islands," Mr. Meade-Waldo
further writes*:—"The Courser is common and resident in Fuerteventura and
Lanzarote, and occasionally met with in Gran Canaria. About 1000 eggs of this
poor bird were taken in the spring of 1891 in the island of Fuerteventura and
sent to Europe, by far the greater number to England. Of course nearly double
the number were destroyed, as the eggs that were incubated would all be thrown
away. It is sincerely to be hoped that the market has now been glutted, and
that the eggs will have so fallen in value as not to be worth taking again. At
the price of two and even three pesetas apiece, that was offered for them out
there, nearly the whole population (including, I have been assured, some of the
priests) turned out egging, and probably pretty well cleared the whole of the nests
for that season. It is possible there may have been an extra number of birds in
1891, but in the three breeding-seasons that I spent in the island, though there
were numbers of birds, not nearly all were breeding. Possibly after the very wet
winter of 1890-91 there was a greater abundance of food, and so a larger number
of pairs nested. It is not always the birds of the previous year that do not breed,
as a cock of a breeding-pair that was shot was in half-immature plumage."

* 'Ibis,' 1893, p. 203.
EASTERN GOLDEN PLOVER.
Charadrius fulvus, J. F. Gmelin.
EASTERN GOLDEN PLOVER.

CHARADRIUS FULVUS, J. F. Gmelin.

EXPLANATION OF PLATE.

Figure 1. Yenesai, lat. 69½°, July 1877; H. Seebohm coll. Natural History Museum, South Kensington.

Figure 2. Yenesai, lat. 71½°, Ditto. Ditto. Ditto.

Only two occurrences of this species in the British Islands are recorded: an example said to have come from Norfolk was found in Leadenhall Market in 1874, and another is recorded as having occurred in Orkney in 1887.

Mr. H. Seebohm, who obtained the only authentic eggs of this species known to naturalists, writes:—"The Asiatic Golden Plover breeds on the tundras of Eastern Siberia, from the valley of the Yenesay to the Pacific. It passes through Japan, South Siberia, and Mongolia on migration, and winters in India, the Burma peninsula, China, the islands of the Malay archipelago, Australia, and the islands of the Pacific Ocean. It has been known to stray as far as New Zealand in the east, and to the Mekran coast, Malta, Algeria, Poland, and Heligoland in the west.

"The Asiatic Golden Plover, like its cousin the Common Golden Plover, is a bird of the tundra, frequenting the vast solitudes that are such a characteristic feature of the Arctic regions. It spends its winters in southern latitudes, and arrives on these Arctic tundras as soon as the south wind melts the snow and calls the slumbering country into life. In its habits it very closely resembles its near ally in Europe. It walks and runs about the ground, or wades into the shallows in search of its food, which consists principally of insects, worms, and slugs in summer, and of various small marine animals, insects, &c. in winter. Its flight is very similar to that of the Golden Plover, and it possesses the same habit of going in flocks or small parties.

"I first made the acquaintance of the Asiatic Golden Plover on the Arctic

* 'History of British Birds,' vol. iii. pp. 40-42.
circle in the valley of the Yenesay. I shot my first specimen on the 5th of June in our winter-quarters on the river, and afterwards secured many more specimens as it passed the Koo-ray-i-ka on migration. I did not observe it again until we reached lat. 69° 1/2 on the open tundra, just beyond the limit of forest-growth. Not a trace of a pine tree was to be seen, and the birch trees had dwindled down to stunted bushes scarcely a foot high. On the 14th of July, as we were delayed in our passage down the river by a gale, I took advantage of the delay and went on shore for a few hours. A climb of about a hundred feet brought me to the tundra. I took a nest of the Dusky Ouzel with young birds as I climbed up the steep bank where alders and willows still flourished luxuriantly, and had scarcely reached the top before I heard the cry of a Plover. The tundra was hilly, with lakes and swamps and bogs in the wide valleys and plains. I found myself upon an excellent piece of Plover-ground, covered more with moss and lichen than with grass, sprinkled with patches of bare pebbly earth, and interspersed with hummocky plains, where ground-fruits and gay flowers were growing. I soon caught sight of both male and female, and sat down with the intention of watching the latter to the nest. After wasting half an hour, during which the bird wandered uneasily round and round me, without showing any partiality for a special locality, I came to the conclusion, either that the eggs were hatched, in which case my watching was in vain, or that I was so near the nest that the female dare not come on. The male had a splendid black belly; and I decided to take my first good chance of a shot at him, and then to devote another half-hour to a search for the nest. All my attempts to follow the female with my glass, in order to trace her to the nest, proved ineffectual; she was too near the colour of the ground and the herbage was too high. Feeling convinced that I was within thirty paces of the nest, I shot the male and commenced a diligent search. He proved to be, as I suspected, the Asiatic Golden Plover with grey axillaries. By a wonderful piece of good fortune I found the nest with four eggs in less than five minutes; it was merely a hollow in the ground, upon a piece of turfy land, overgrown with moss and lichen, and was lined with broken stalks of reindeer-moss.

“At Golcheeka the Asiatic Golden Plover was very common, and I tried to watch several birds to the nest, but in every case without success; they behaved exactly as if they had young. I succeeded in catching one young bird in down, and reluctantly came to the conclusion that I was too late, on the 20th of July, for eggs. The eggs of the Asiatic Golden Plover are very similar to those of the European species. Those I obtained (the only authentic specimens known to exist) vary in ground-colour from light buff to very pale buff with a slight olive
tinge, blotched and spotted with rich brown. Some eggs have the markings irregular, and many of the blotches are confluent, whilst other examples have most of the markings round the large end. The grey underlying markings are small and comparatively few in number. The character of the markings is precisely similar to those on the eggs of the Common Golden Plover. They vary in length from 1·92 to 1·85 inch, and in breadth from 1·32 to 1·27 inch. The eggs of this bird very closely resemble those of the Common Golden Plover, but are slightly smaller."
LAPWING.
Vanellus vulgaris, Irrudens.
LAPWING.

VANELLUS VULGARIS, Béchstein.

Explanation of Plate.

Figure 1. Banffshire, April 16, 1893. In collection of F. Poynting.
„ 2. Leck, Staffordshire, April 15, 1894. Ditto. 

This well-known species is resident and generally distributed throughout the British Islands.

Macgillivray writes as follows, respecting this species*:—"In the middle of March, should the weather be good, they return to the higher grounds and unfrequented pastures. Frequently about this season, however, boisterous weather suddenly comes on, accompanied with snow or hail; and this so commonly happens in the eastern districts of the middle division of Scotland, that the people always expect what they call the 'Tuchit's storm,' about the time of the arrival of that well-known bird. Thus Mr. Robertson, in his Agricultural Survey of Kincardineshire, says:—'The Green Plover or Peasweep, arrives here so very correctly about Candlemas term, that the storm which generally happens at that season of the year goes by its name (the Tchuchet storm).’ Many of them, however, betake themselves to the vicinity of marshes and moors, in any situation, or to the downs or links, or disperse over the fields. Their nests, which are slightly constructed, being often merely a few straws or blades laid in a shallow cavity, are found sometimes on an exposed slope or level part of the moors, where the herbage is short, sometimes on tufts in the midst of a bog or morass, sometimes on the bare open ground or in a

field, and, owing to its nature and the colours of the eggs, is not readily perceived. Should one approach it, the female runs off long before he comes up, and both she and the male fly about, now high, now low, suddenly descending and rising, in gentle curves or abrupt windings, and performing a variety of evolutions, sometimes striking their wings so forcibly as to cause a loud noise, and usually emitting their peevish wail. So great is their anxiety, that they will frequently come very near, and may thus be easily shot on such occasions. Should other pairs be in the neighbourhood, some of them will also fly up, and join in the performance. Meanwhile, the female will perhaps steal away quietly to some distance, and run limpingly along, with the most innocently pitiable appearance imaginable, stopping now and then as if to attract your attention, and entice you off in pursuit. Or she may go farther away, and hanging out one or both of her wings, run coweringly along. So excellent is the simulation, that one can hardly refrain from pursuing, even although smiling at his folly. It is needless to state, that no one has any chance of catching one of these lame Lapwings. When a dog approaches their nest, they are still more active in attempting to intimidate or bewilder him, and sometimes will even hit him with one of their wings.

"During the whole of the breeding-season, even when not disturbed, but acting under the impulse of their natural instinct, they may be seen flying about, hovering, gliding, slanting, and curving along, shooting through the air with a continuous noise of the wings, or causing an undulated loud hum by flapping them strongly, and at the same time emitting various modifications of their usual cry. This behaviour is, no doubt, analogous to the aerial rambles of the Snipe at the same season. The Golden Plover also exhibits a similar tendency, but it flies more sedately, not indulging in these fanciful freaks, although it utters a cry different from its usual whistle.

"The eggs are four, very large for the size of the bird, but much smaller than those of the Golden Plover, and, like them, pyriform, their average length an inch and ten-twelfths, their greatest breadth an inch and a quarter, or somewhat less. They are generally pale brownish-yellow, blotched, spotted, and dotted with brownish-black; but their ground-colour varies to greenish-grey, or olivaceous, and the markings are various, being small or large, thickly or sparingly distributed. The young are closely covered with soft down, variegated with greyish-yellow, brown, and black, and leave the nest immediately after exclusion, crouching among the moss or herbage when alarmed. So long as they remain motionless, it is almost impossible to perceive them; but the anxiety of their parents often betrays their place of refuge, for they will fly up, screaming, flapping, and wheeling about."
Mr. P. H. Emerson gives the following excellent description of the nesting-habits of the Lapwing on the Norfolk Broadland*:-—"And when the lengthening days of March have warmed the sandy warrens, some of the cocks in the flocks frequenting that district begin to tumble about amongst the hens, calling, 'Three bullocks a week, week arter week;' and the fenman's heart is glad, 'for they'll soon be laying now,' he says with bright eyes, thinking of the six shillings he will get for the first dozen of blotched eggs. But his heart is gayer still when he sees both birds sitting about on the warrens, and mayhap on the ploughed marshes as well as the clear marshes, for he knows the beginning is near. He saw them tumbling nearly a fortnight ago, and he knows they generally lay three weeks after they begin tumbling, or 'pairing,' as he calls it. But when he sees the cocks fly up and cut at an old grey crow that has just flown over, he is assured 'there be eggs,' and he is right; we should find eggs.

"But let us select our marshes, for we will not go to the warrens, although the first eggs are sure to be found there; the soil is warmer there. We will go and look over a clear marsh, a ploughed marsh, a grass marsh, or a new-lay, and a few days after the first eggs have been found, for we wish to see the birds busy at their great task.

"It is a beautiful dawn in early May, the daylight sky brightening to the nor'ard, as we start in the heavy dew up the wall; for daybreak is the time to find a duck's nest, and soon after daybreak a peewit's cradle. We will go down now across that dike into the marsh, where the cocks of litter stand piled, ready to be poled to the big marsh-boat, and carried to the farm. As we walk across the dike over the old plank, all riddled with bolt-holes—for 'tis a footbridge torn from some wreck salvaged from the Hasboro' sands—I throw my cap into the air, and look! See you bird silently and swiftly flying across the water and away over the reed-beds? That is the hen. You must watch her, and her only, if you want to find eggs. But here comes the cock tumbling, and excitedly calling, 'Three bullocks a week—week arter week—week arter week.' An expert egger could tell you how many eggs she has by her flight, for as her eggs increase her flight gets more sluggish, and when she begins sitting, she is 'a real old lump' when she flies away, and indeed such is the case with most birds. But the hen-peewit is exceptionally active until the second egg is laid, which, by-the-bye, is not the day after the first is laid. They sometimes lay every day—sometimes omit two days without laying. But we will pay no heed to the old cock; we know his tricks to lead us away on a cock-peewit chase, which is far

worse than a wild-goose chase—for we are very likely, if unwary, to attempt the
one, and the other we should not.

"See those shallow cup-shaped depressions near those old thistles. They
are cocks' nests. He begins the game by 'scrabbing' several of them. I have
counted five such made by one bird. Some here, you see, are lined with pulled
grass; but they are nothing. She builds the real nest, and that is why the
feumen are more delighted when they see her on the ground; for they know
that when he is on the ground alone he is only pretending with his 'cock's nests.'
But you see the cock-bird has gone too, since he could not take us in. But no
doubt we shall flush more birds on this marsh, for they are sensible birds, and
often build in company with each other, and snipe and red-legs too build near
them on suitable marshes; but this one is too dry for them. But some couples
are unsociable and drive off all socially-inclined couples.

"Look, there is an old cock standing by yonder fork left standing in a heap
of litter; the hen has flown silently away whilst we have been talking. There
are eggs thereabouts, for he is watching them, as the cock always does when the
hen leaves the nest. But see, he is up and coming towards us, crying the usual
cry—hovering close over our heads, as if eager to pierce our caps. There must
be young; he is so excited. Had we a dog with us, he would dart down almost
within a yard of it. Let us search here amongst these thistles and rushes, and
be careful you do not tread on the nest, for it is very easy to pass it over a dozen
times. But see, here it is, just by this thistle-stalk, with one helpless but pretty
little chick, two of the eggs 'sprung' and the fourth egg sound, but bright,
smooth, and warm to the touch, as all hard-set eggs are. The eggs are lying in
the grass-lined cup on a slant, their small ends pointing inwards, and that is their
usual position, though the hen turns them round every day, as, indeed, I think
most birds do, so that they may be evenly warmed into life. The pretty little
fellow is evidently only just born, or he would be out of the nest, crouching in
the print of a cow's or horse's hoof, and the eyes of Argus alone would find him.
Once only did I find a youngster out of his nest, and that was on a bare mountain
in Perthshire: there was no cover. This youngster here, had he been old
enough, would have run out of the nest, and, once having left his cradle, nothing
would have induced him to return. But he is only just hatched: for had the
four chicks been born, both old birds would have stayed to defend their young;
by that sign shall you know whether there be young.

"But let us lie behind this heap of stuff over here and watch the first hen we
flushed; she ought to be returning soon, for I have seldom known them leave
their eggs more than twenty minutes, if there be more than one egg. But she is
not sitting yet, or the cock-bird would have stayed longer; and she begins to sit when the third egg is laid, though four is her full number.

"Let us wait here, though a drizzle has come on, greying the trees and distant sandhills, for the birds are sure to be back soon now; for a peewit never leaves her eggs exposed to the wet. She always covers them, or more usually returns at all hazards and sits upon them. But hist! there she comes across the wall and flies down to the marsh. See her. She is looking intently. 'All's well,' she thinks. See her running along for a few yards—for peewits seldom walk, but run, after appearing to pick up something as they go. Then she stops again, and listens, and on she goes right on to the nest by that heap near the dike. Soon you can scarcely see her with the naked eye. And yet these brave birds sit upon the lonely marshes through the night-watches, regardless of the cruel and fierce rats and ruthless weasels and stoats that are breeding near by, and who often rob their eggs and young, if they do not eat the mother herself. And yet the birds sit on through darkness unprotected, merely obeying an instinct stronger than fear. Having made our mark, after the manner of the fenmen, we run up and flush her. She rises again, and flies lapping off, silent as death, striking away over the water again; and after a little search we find the nest, lined with rush and broad-leaved grass, upon which lie two eggs, heavy and sweet and fresh, as the water-test in the nearest dike proves. And we will leave them, for they are not so good to eat as a fresh hen's egg, and chance the old Kentish crows sucking them, as they often do, as well as eating the young peewits when they can catch them. But see, here comes the excited cock again, tumbling about, and thrashing the air with his wings, and, till he is about to fly up, there he goes into the open, twisting, and turning, and shrieking his dull refrain, 'Three bullocks a week—week arter week—week arter week.'

'And so these birds lay on, if robbed, unto their clutches of four eggs each, or a round dozen per bird, laying as late as harvest-time; for they must have a young brood if possible. But they leave the place their early nests are robbed in, and go moving from marsh to marsh at each new loss of embryo; and so regular is this retirement before the eggers, that the experienced say, 'Ah! well, they'll be inter our marsh next, directly they're robbed over yonder.' But this egging has sadly thinned their numbers; and instead of being able to find two dozen nests of a morning, as was formerly common, we may be lucky to find one in many a marsh.'

Mr. F. S. Mitchell writes as follows, with reference to the breeding of the Lapwing in Lancashire*::—"It is an early breeder, hatches two broods in the

* 'Birds of Lancashire,' pp. 179, 180.
season, and the bulk lay their first three or four eggs in April, but every year
many nests may be found in March, and in 1883 a confiding pair near Clitheroe
had made all preparations, and got one egg safely deposited, on the first of that
month; the storm which came a week later, however, upset their calculations,
and made all the birds in the neighbourhood flock together again for shelter.
The earliest nest I have heard of was reported to the 'Field' of March 4th, 1882,
by Mr. H. J. Parke, was says that 'on February 22, a Plover's nest was found
in Brindle, near Preston, containing three eggs, and on the 25th the fourth egg
was laid, when the bird commenced to sit.' . . . It shows great attachment to its
nest, defending it boldly, and being very reluctant to leave it, as the following
instance will show:—About half-past five in the evening of May 15th, 1879,
Mr. T. Altham found a nest with four eggs in, three of which were completely
covered with a dry cake of cow-dung, probably kicked over it by accident by the
cattle. The birds had evidently been trying to remove it, but had not been able.
The eggs were cold, but he took them home, put them on the oven all night, and
at six next morning took them to the nest again. The old birds were about the
place, and the hen, on his leaving, went on at once, three of the eggs the
morning following being hatched and the young gone: the remaining egg had
been accidentally cracked."

Mr. H. Seebohm says that the eggs of the Lapwing vary in length "from
2·0 to 1·75 inch, and in breadth from 1·4 to 1·28 inch."*

Mr. H. E. Dresser states that eggs of this species in his collection measure
from 1·85 by 1·37 inch to 1·65 by 1·32 inch; and that he was informed by the
late Mr. Benzon that the latter possessed eggs measuring from 2·0 by 1·81 inch
to 1·57 by 1·31 inch. One elongated egg measured 2·36 by 1·30 inch, and a very
small one measured 1·1 by .65 inch.†

* 'History of British Birds,' vol. iii. p. 59.
† 'History of the Birds of Europe,' vol. vii. pp. 551, 552.
TURNSTONE.
Strepsilas interpres (Lamarck).
TURNSTONE.

STREPSILAS INTERPRES (LINN. EUS).

EXPLANATION OF PLATE.

Figure 1. Skåne, Sweden. June 6, 1891.

In collection of H. Massey, Esq.

The Turnstone is a spring and autumn visitor to the coasts of the British Islands, a limited number spending the winter in the south and west of England. Pairs of these birds have been known to spend the summer on our coasts, but authenticated eggs do not appear to have been obtained in our Islands. The expectations that this species would be found nesting among the Scotch islands have not been realized by the explorations of Messrs. Buckley and Harvie-Brown.*

Mr. Howard Saunders writes †:—"The Turnstone breeds in Greenland, Iceland (where it is sedentary), and perhaps in the Faeroes; but its best known and most accessible nesting-places are on the coasts and islands of Scandinavia, Denmark, and of the Baltic. It has occurred on Jan Mayen, Spitsbergen, and Novaya Zemlya, and is found in summer along the northern coast of Siberia as far as Bering Straits; while during the cold season its range extends over Asia, and


down to Australia, Tasmania, New Zealand, Polynesia, South America, and the African region. Mr. Godman believes that the Turnstone breeds in the Azores, and it may possibly do so in the Canaries, while Mr. Tait says that in Portugal it is usually seen near the mouth of the Douro 'from the beginning of April till the middle of September,' adding that in the summer of 1869 a young bird was brought to him alive and kept in a cage for many months; no eggs have, however, been taken south of the Baltic. On migration the Turnstone is found along the entire coast line of Europe and on many inland waters, and it is generally distributed in North America, breeding in the Arctic regions; but *S. melanocephalus*, a second member of this small genus, is also found in Alaska and California."

The late Dr. Saxby stated that he discovered the eggs of the Turnstone on the shores of Unst, Shetland Islands. Although some doubt has been thrown upon his correct identification of the eggs *, his description of the habits of this species and of his discovery of the eggs is so interesting, that it is here reproduced in full †:—

"The Turnstone arrives regularly in summer, and again in March or April, a few remaining throughout the winter. More than half a dozen are seldom observed together, but upon rare occasions I have seen as many as twenty or thirty. When Turnstones are in company with other species they are not very difficult to approach, but having been once fired at, they will remain shy for weeks afterwards. On being disturbed, they nearly always utter their loud peculiar cry, which, by the way, it is not quite impossible to imitate by unscrewing the tight-fitting lid of an old-fashioned 'powder-puff box'—and they invariably fly seawards, seldom alighting until they have several times passed and repassed the selected spot. When wounded, they swim with the greatest ease, and will even take to the water voluntarily when closely pursued, but I have never yet seen one attempt to dive. It is a matter of surprise that so careful an observer as Macgillivray should have regarded 'their alleged stone-turning habits as a fable.' I have watched these birds for hours at a time, and besides witnessing the act repeatedly, have afterwards visited the ground, where the displacement of stones and shells, and even the completely reversed position of some, has been quite sufficient to prove the existence of the habit in question. Such traces are of course most readily observed upon a sandy beach where the stones are few and scattered; but, indeed, it is chiefly among sea-weed that this peculiar method of searching for food is employed, the

* Mr. H. E. Dresser, for example, remarks with reference to Dr. Saxby's discovery:—"But he does not appear to have had any authentic eggs of that species [Turnstone] to compare them with, as he compares them with the plate in Mr. Hewitson's well-known work on oology" ("History of the Birds of Europe," vol. vii. p. 558).

† 'Birds of Shetland,' pp. 170–172.
wet appearance of the newly-turned portions of the masses of drifted weed making them evident enough to an observant eye. Although this bird mostly frequents rocky shores, the sands, during stormy weather or immediately afterwards, appear to be very attractive.

"Thomas Edmondston, seeing this bird in the north of Shetland at all times of the year, considered it resident; and though he never heard of the eggs being found, he seems to have been correct in his supposition. As long ago as 1859 a boy brought me some eggs from Woodwick, among which were two which were so like those of the Turnstone that I always considered them as such, although unwilling to label them, as the finder could give no account whatever either of birds or nests. For years after this I was sadly tantalized by seeing Turnstones about the shores of Unst during the breeding season,—not small flocks, which merely waited until summer was well advanced, but pairs, which lingered about particular localities. It was seldom, however, that the pair were seen together; the male might be feeding upon the beach and the female several hundred yards away upon the rough stony ground. The most likely place of all seemed to be between Skioting and Clugan, and to this spot I directed my attention more particularly. It was a peculiarly wild spot, quite out of the way of the people's track to and from their cottages and boats, and, so far as I could imagine, well suited to the breeding habits of the birds. The ground is rough and quite uncultivated, backed by stony hills, and gradually sloping towards masses of weather-worn rocks, which form a barrier preventing the encroachments of the sea. Where the vegetation gradually ends, the ground is very irregular and stony, tufts and patches of long rank grass apparently offering most suitable nesting-places. On the evening of the 16th of June, observing a female Turnstone behaving very suspiciously, I searched most minutely among the grassy depressions and hollows for more than two hours, and was wandering, almost in despair, upon the gravelly and stony edge which had been washed bare by the winter's spray, when, to my delight, there lay three eggs in a hollow among the stones, slightly sheltered from the north by a flattened fragment which partly overhung them. The hollow, which had evidently been artificially formed, was scantily lined with dry grass, and measured a little less than five inches across. I was rather surprised that the bird displayed no anxiety; possibly she was watching me from some concealed position, and would have been bolder had all four eggs been laid and incubation commenced; but at any rate I saw nothing of her for about an hour previously to my discovery of the treasure. Although I had not the smallest doubt that the eggs were Turnstone's—indeed they could have been nothing else—I thought it best to take one egg, intending to return
cautiously next evening, and perhaps see the bird leave the nest. However, early in the morning a man came with the very two eggs to claim the reward I had offered, and although he seemed much aggrieved by the charge, I am quite sure the rascal had been watching me. Two of the eggs were a good deal like the figure in Mr. Hewitson's work, but the ground-colour of the third was of a brighter green; all were blotched with amber brown, reddish brown, and purplish grey, the markings of the latter colour being smallest. The average length was one inch and six lines, the breadth one inch two lines.

"I have no doubt that if some of the smaller islands were carefully and patiently explored, other nests would be found. Shetlanders as a rule care little for such minute work. They have no objections to visit a colony of Terns or Gulls, and bring home a good-sized handkerchief of eggs; but to potter about for hours after 'twa-three peerie bits o' tings' like Turnstone's eggs, is more than they have patience to attempt."

Messrs. F. and P. Godman met with this species at Bodø, Norway, in 1857. They write* :—"On June 3rd, whilst rowing amongst some islands, we first noticed this bird. We afterwards found five nests, being in every instance attracted to the islands on which they were situated by the cries and motions of the old birds, which they began long before we neared the place. All the nests were cunningly placed, showing no preference for any particular locality. One was on a ledge of a rock; another on the open sand, close to an Oyster-catcher's; two were in the grass; and the fifth under a ledge of rock, well concealed by weeds and grass."

With reference to the Turnstone, Prof. Collett writes† :—"The last few years I have examined a considerable number of the nests of this species, in particular on the coast of Namdalen, in June 1871. They are mostly built under large stones or beneath broad-leaved plants (Archangelica littoralis), or juniper bushes. Several pairs were generally found breeding close to one another. The eggs—invariably 4 to the set—were quite fresh in the middle of June. In the breeding-haunts the birds exhibited great alarm, but did not, like the Charadriii, feign to be wounded. Incubation-spots are found in both sexes. The stomachs contained small Coleoptera, the young of a Litorina, small crustaceans, coarse gravel, and scales of fishes (swallowed perhaps accidentally)."

Messrs. H. J. Pearson and E. Bidwell, in their notes "On a Birds'-nesting Excursion to the North of Norway in 1893," write as follows, with reference to this species‡ :—"In good numbers on some of the islands in the Porsanger.

* "Notes on the Birds observed at Bodø during the spring and summer of 1857," 'Ibis,' 1861, p. 86.
† "Remarks on the Ornithology of Northern Norway," p. 70.
‡ 'Ibis,' 1894, p. 234.
Had any historian of British birds described the nesting-habits of this species, we should probably have found a good many eggs, but the very meagre information given rather hindered than helped us. Directly we found a bird we noticed that, if high ground was near, it immediately flew to it, uttering its alarm-note, and presently it was joined by the female; both birds would perch on boulders of rock. We spent hours in trying to watch them back to their nest, but they would not move from their stations whilst we were in the neighbourhood. We also spent many hours searching under stones near the places where we saw the females, but without success. The last evening but one before we left the Porsanger, whilst walking by the shore, we found a nest placed in the centre of a patch of dwarf sallow not 5 paces from high-water mark. A second was found in a similar position, and a third under a flat stone just 12 paces above high-water mark.”

Mr. H. Chichester Hart, Naturalist on board H.M.S. ‘Discovery,’ in his “Notes on the ornithology of the British Polar Expedition, 1875–6,” writes*:—

“On the 25th August, 1875, Turnstones, young and old, were collected in small flocks preparatory to leaving Discovery Bay. They were then feeding along the shore, all their means of subsistence inland being frozen up. In 1876 two or three Turnstones arrived on the 29th May; on the 5th June I shot a male in beautiful summer plumage; by the 6th and 7th they were of frequent occurrence, and I saw a few passing to the north in small flocks. The Turnstone, like all other birds in Discovery Bay, is always at war with the Long-tailed Skua, flying at and insulting him with great courage. Turnstones, though feeding along shore at the close of their visit, subsist during the summer upon bees, caterpillars (Argyumnis chariclea, Sch., and Dasychira grønlandica, Wocke), and Tipulæ. The stomachs of several examined were almost entirely filled with caterpillars, and I often watched them with a powerful glass and wondered at their dexterity in finding them. The summer note of the Turnstone is loud and pleasant: a twittering chatter of two notes quickly repeated, which is produced by the male bird while watching near the nest. On the 12th and 24th July, 1876, two nests were found with four eggs each; on the 1st August I saw a brood of four young, just able to fly; on the 6th there were many young about, and by the 9th they were feeding in small parties along the shore. The first nest was found by one of the sailors in a valley about three miles inland; by my instructions he left it untouched for me to see in situ; but, having taken insufficient bearings, when we returned together, he could not re-discover it. The ground was covered with a

* ‘Zoologist,’ 1880, pp. 123, 129.
uniform grey shingle with scattered patches of brown herbage. For upwards of an hour did we cross and re-cross an area of about fifty square yards, within which limits my companion was positive that the nest was placed, the parents flying round in much agitation all the time. At last, in despair of thus finding the eggs, and fearful, moreover, of treading on them, I withdrew to a hillock about a hundred yards off, and watched the female through my field-glass, the male having deserted his post when he thought we had left. After a few minutes she alighted, and while watching her threading her way for about ten yards among the stones, to my delight, four eggs came within my field, and in another second she was between me and them. Even then, so exactly did both eggs and parent resemble their surroundings, it was with difficulty we could see the nest, and, even while actually looking at the eggs, it was hard to distinguish them from the pebbles and herbage around. The nest was composed of white lichen and Dryas-leaves, loosely laid together upon a hollow in the turf of the latter. The eggs were rather pointed, and in colour and marking like those of the Long-tailed Skua, with the ground-colour less greenish in shade. In Polaris Bay Dr. Coppinger observed Turnstones frequently in July 1876."

Mr. H. Seebohm describes the eggs of the Turnstone as follows*:—"The eggs are four in number, differing considerably from those of the typical Plovers, and approaching much more closely those of the Sandpipers. They vary from pale olive-green of different shades to pale buff in ground-colour, dashed, clouded, spotted, and blotched with olive-brown and very dark brown, and with underlying markings of purplish grey. Some specimens are boldly streaked with dark brown, especially on the larger end, others have most of the larger markings running in an oblique direction round the surface. Some are much more richly marked than others; occasionally the markings are blurred and indistinct, whilst on others they are bold and well defined. They vary in length from 1·7 to 1·52 inch, and in breadth from 1·2 to 1·1 inch. The eggs of the Turnstone cannot be confused with those of any British Plover, nor easily with those of any of the Sandpipers. Perhaps they most resemble certain varieties of the Common Snipe, though they are seen to be very different when compared. Only one brood is reared in the year; and both male and female appear to take turns in the work of incubation."

The late Dr. T. M. Brewer states that the eggs of this species vary in length from 1·72 to 1·6 inch, and in breadth from 1·23 to 1·13 inch, averaging about 1·66 by 1·18 inch.†

† 'Water Birds of North America,' vol. i. p. 124.
COMMON SNIPE
Gallinago creleis (Fremel)
COMMON SNIPE.
Scolopacidae.]  
GALLINAGO COELESTIS (Frenzel).

EXPLANATION OF PLATE.

Figure 1. Steeton, Yorkshire, April 12, 1889.
"  2. Winfrith, Dorset, May 13, 1891.
"  5. Midgarth, Stronsay, April 9, 1893.
"  6. Wool, Dorset, May 15, 1892.
"  8. Aberdeen, May 15, 1892.
"  9. Wool, Dorset, May 14, 1892.

In collection of H. Massey, Esq.

This species is a common winter visitor, considerable numbers remaining to breed throughout the British Islands.

Referring to the Common Snipe, Mr. H. Saunders writes *:—"This species still breeds in England and Wales wherever drainage has not abolished the localities suited to its habits, and it is comparatively abundant in the marshes of Suffolk, Norfolk, and Lincolnshire, while generally distributed on the northern moorlands, and up to a considerable elevation in Scotland and Ireland. The birds produced in the British Islands are few, however, compared to those which annually visit us in October and November, when many are killed by striking against the lanterns of lighthouses. These migrants, though they frequently shift their ground under the influence of the weather, often remain through the winter till March."

Describing the habits of the Common Snipe, Macgillivray writes as follows †:—"Beautiful are those green woods that hang upon the craggy sides of the fern-clad hills, where the heath-fowl threads its way among the tufts of brown heath, and the Cuckoo sings his ever-pleasing notes as he balances himself on the grey stone, vibrating his fan-like tail. Now I listen to the simple song of

the mountain Blackbird, warbled by the quiet lake that spreads its glittering bosom to the sun, winding far away among the mountains, amid whose rocky glens wander the wild deer, tossing their antlered heads on high as they snuff the breeze tainted with the odour of the slow-paced shepherd and his faithful dog. In that recess formed by two moss-clad slabs of mica-slate, the lively Wren jerks up its little tail, and chits its merry note, as it recalls its straggling young ones that have wandered among the bushes. From the sedgy slope, sprinkled with white cotton-grass, comes the shrill cry of the solitary Curlew; and there, high over the heath, wings his meandering way the joyous Snipe, giddy with excess of unalloyed happiness.

"There another has sprung from among the yellow-flowered marigolds that profusely cover the marsh. Upwards slantingly, on rapidly vibrating wings, he shoots, uttering the while his shrill two-noted cry. Tissick, tissick, quoth the Snipe, as he leaves the bog. Now in silence he wends his way, until at length having reached the height of perhaps a thousand feet, he zigzags along, emitting a louder and shriller cry of zoo-zee, zoo-zee, zoo-zee; which over, varying his action, he descends on quivering pinions, curving towards the earth with surprising speed, while from the rapid beats of his wings the tremulous air gives to the ear what at first seems the voice of distant thunder. This noise some have likened to the bleating of a goat at a distance on the hillside, and thus have named our bird the Air-goat and Air-bleater. The sound, I think, is evidently produced by the rapid action of the wings, which, during its continuance, are seen to be in tremulous motion. It comes on the ear soon after the bird commences its descent, and ceases when, having gained the lowest part of the curve, it recovers itself, and ascends with a different and ordinary motion of its wings. I have never heard it under any other circumstances. Were it produced by the voice it might be emitted when the bird is on the ground, or during its ordinary flight; but should one hear it on the moor, he will invariably find that it proceeds from on high. In this manner the Snipe may continue to amuse itself for, perhaps, an hour or more; and sometimes, in the clear sky, one may trace it until at length it mounts so high as to be no longer perceptible.

"This drumming noise of the Snipe commences in April, and is continued through the summer. It is altogether a solitary act, although several individuals may often be heard at the same time, and may be an expression of the happiness of the bird, or an intimation of its presence to its mate while sitting upon her eggs. We have no means of ascertaining its object, nor has it been determined whether it be performed by the male only, or by the female also. When the bird has gone through his evolutions, he descends, often with astonishing velocity, on
COMMON SNIPE.

partially extended and apparently motionless wings, diminishes his speed a little as he approaches the ground obliquely, and alights abruptly.

"In winter this species is dispersed over the whole of Britain, and in summer many remain to breed even in the most southern parts, where there are suitable places; but in England the number is very inferior to what is met with in Scotland; on all the moist heaths of which, but especially on those of the northern parts and the Hebrides, it is extremely abundant. The multitudes that rear their young in the bogs of Lewis, Harris, and the Uists are truly astonishing. There the nests are found in various situations; often in the grassy pastures, but more frequently on the unfrequented moors, from the level of the lakes to the height of two thousand feet. A slight hollow, lined with bits of heath and grass or sedge, and situated on a dry tuft, or among stunted heath or moss, receives the eggs, which are usually four in number, although I have often found only three, pyriform, placed with the small ends together, generally an inch and seven-twelfths long, an inch and one-twelfth in breadth, of a greyish-yellow colour, tinged with greenish-blue, and marked with irregular spots and patches of dark brown and brownish-grey, more numerous toward the larger end. They vary considerably in form, size, and colour."

Respecting the nesting habits of this species in Shetland, the late Dr. Saxby writes *:—"The Common Snipe begins laying early in May, but fresh eggs may be found even as late as the middle of August. Every peat bog or moist meadow may be regarded as a breeding ground, yet the nests are also found upon the highest hills, not less upon the steep sloping sides than upon the tops; but in no case far from water, whether it be in the form of a loch or of a mere stream trickling over the surface of the stones. The nest is by no means so flimsy and so carelessly constructed as it is usually represented to be, a tolerably thick layer of dry grass or of bits of fern being neatly arranged low down among the herbage, forming a cavity shaped like a deep saucer, and measuring four inches across. It is generally well concealed, so that when the bird sits close, as she usually does until almost trodden upon, it is difficult to discover. I have only once found as many as five eggs in a nest, and this was in a marsh where birds of the same species were breeding abundantly; the dissimilarity of one egg to the other four rendering more than probable that the odd one was laid by a second female. Any attempt to convey an accurate idea of the extraordinary variety of colouring which prevails among the eggs of the Common Snipe would be futile. I have seen them with the ground-colour of almost every shade and mixture of tint which

* 'Birds of Shetland,' pp. 201, 202.
is known to occur among the eggs of the Scolopacidae, from cream colour or light blue to deep brownish ochre and olive green or olive brown. The markings also vary considerably, the eggs sometimes being largely blotched, sometimes minutely freckled, nor is it by any means unusual to meet with specimens having the large ends surrounded with long irregular streaks like those upon the eggs of the Yellowhammer; indeed, on looking over Mr. Hewitson's figures of the eggs of the Scolopacidae, I cannot observe one, with the single exception of the broad-billed Sandpiper, which would not, were the size altered, accurately represent a variety of the egg of the Common Snipe. Eggs from the same nest nearly always resemble one another in colouring; and among the thousands which I have seen uniformity in size and shape prevails."

Mr. Abel Chapman writes*:—"Snipes [breed] at all elevations, on hill or valley. The nest is always well concealed under a tuft of grass or heather; and the old bird sits close. Snipe are very irregular in their dates of laying; I have found young ones unable to fly on August 12th, and, on the other hand, have known of a nest as early as 19th March, and of young Snipes on the wing in the last week of April."

Mr. Seebohm says that the eggs of the Common Snipe "vary in length from 1·65 to 1·5 inch, and in breadth from 1·15 to 1·05 inch." †

Mr. H. E. Dresser states that eggs of this species in his collection measure from 1·7 by 1·15 inch to 1·52 by 1·02 inch. ‡

† 'History of British Birds,' vol. iii. p. 244.
RED-BREASTED SNIPE.

Macrorhamphus griseus (J. F. Gmelin).
RED-BREASTED SNIPE.

Scolopacidae.] MACRORHAMPHUS GRISEUS (J. F. Gmelin).

EXPLANATION OF PLATE.

Figure 1. Anderson River Fort, British N. America, June 29, 1864 (parents shot);

"  2. Anderson River Fort, British N. America, June 30, 1865 (parents shot);

This American species is a rare accidental visitor to England and Scotland, no example having been met with in Ireland.

Mr. Howard Saunders describes the geographical distribution of the Red-breasted Snipe as follows *:— "It breeds on the vast morasses round Hudson Bay, and about as far south as lat. 44\(^\circ\), migrating along the east coast; but west of the Mississippi valley a slightly larger form prevails, with somewhat longer bill and brighter coloration in summer, and for this many American ornithologists have adopted the name scolopaceus, either specifically or sub-specifically. Both forms occur in winter in the Gulf States and among the West Indian Islands, while it is admitted that birds undistinguishable from those of the Atlantic race occur on the barren-grounds and in Alaska—the summer-quarters of the western form—as well as down the Pacific side of America. For the purposes of the present work we may unite the two under one heading and say that the Red-breasted Snipe breeds throughout the Fur countries, migrating in winter as far south as Brazil on the east side and Chili on the west, while a few wanderers cross the Pacific to Japan and North-eastern Siberia. Its spring arrival on Long Island, near New York—where it is known by the name of 'Dowitcher'—takes place towards the end of April, and within a month the most northern of its breeding-grounds have been reached."

Referring to the form *M. griseus*, the late Dr. T. M. Brewer writes †:— "Mr. MacFarlane found this species breeding in the Arctic Region, in the vicinity of Fort Anderson. The nests were taken between the 21st of June and the 1st of July, the usual number of eggs in a nest appearing to be four. The nests were

† 'Water Birds of North America,' vol. i. pp. 189, 200.
placed on the marshy borders of small lakes, and were composed of a few decayed leaves placed in a depression in the mossy ground. In one instance the female was sitting on the nest, and when approached, ascended in the air, uttering shrill and long-continued notes of alarm and annoyance. She was then, after a few minutes, seen to descend in a perpendicular manner to her nest.

"The eggs of this species are of a decidedly pyriform shape, and vary considerably in size—namely, from 1·55 to 1·75 inches in length, and from 1·08 to 1·20 in breadth. In some examples the ground is drab, with blended shadings of rufous and olivaceous; in others, the ground is a fawn-coloured drab, more slightly olivaceous. The markings are uniformly sepia in color, somewhat intensified about the larger end, and of less size and more scattered at the smaller end." . . . .

With reference to the form M. scolopaceus, Dr. Brewer continues:—"It is not possible to give an exact account of the distinctive habits of the form called 'scolopaceus,' if it really possesses any that are peculiar to it or distinguishable from those of the preceding. Nor can it be stated with certainty how far, if at all, its distribution differs from that of the more common Red-breasted Snipe. In the dress of the scolopaceus this form has been met with both on the Atlantic and on the Pacific coast. It is found in the interior; and, in the winter, has also been met with in Central America. Würdemann secured examples in Florida, and Professor Kumlien has procured birds of this form both in the spring and in the fall, near Lake Koskonong. Lieutenant Warren obtained a single individual on the Missouri River, near Omaha, Nebraska. It has been found very common among the lagoons on the Pacific coast, near San Pedro, in California ('Ibis,' 1866, p. 27). It was described as not apparently ever going down to the salt-flats, its habits being given as somewhat similar to those of Micropalama himantopus, and therefore inferentially different from those of M. griseus.

"Mr. Dall mentions the M. scolopaceus as common about the mouth of the River Yukon, where the M. griseus is spoken of as being very rare up that river. At Nulato this same form is mentioned by Mr. Bannister as being quite common, though not extremely abundant; he found the nest of this Snipe on the 3rd of June, and on the 6th secured the parent with the eggs. The nest was a simple hollow in the ground in a grassy hummock, in the centre of a marshy spot, with scarcely any lining whatever; there was nothing in the shape of a nest substantial enough to be removed. The eggs were four in number, and Mr. Bannister describes them as of a brownish color, mottled with a still deeper tint. The female when startled from the nest shuffled off with great rapidity among the grassy hummocks, presenting a very difficult mark to hit. Only one parent bird was seen. . . . ."
"Eggs in the Smithsonian Collection, marked as having been obtained by Mr. Bannister on the Island of St. Michael's, May 23, 1866, are larger than any eggs of the griseus we have ever seen, measuring 1.80 inches in length, by 1.15 inches in breadth. They have a ground of a well-pronounced rufous drab, blotched with much darker markings of a deep shade of sepia brown."

Referring to the supposed differences between M. griseus and M. scolopaceus, Dr. Coues writes*:"The supposed species (M. scolopaceus), based on larger size and larger bill, is not even entitled to rank as a variety. Almost any flock contains a per cent. of such individuals. The difference in these respects is merely the normal individual variation."

Mr. E. W. Nelson, who separates Macrorhamphus griseus from M. scolopaceus, gives the following description of the habits of the latter form, which he met with in Alaska†:"This is one of the most common waders on the shore of Norton Sound in summer, and is also present in smaller numbers all along the Yukon, where suitable locations occur. It is a rather scarce summer resident about Point Barrow, according to Murdoch. In spring, the middle of May, as the snow disappears, and the first pale leaves of grass begin to thrust their spear-points through the dead vegetable mat on the ground, or as early as the 10th on some seasons, this peculiar Snipe returns to its summer home. At the Yukon mouth I found them on May 12, when they were already engaged in love-making, though the ground was still, to a great extent, covered with snow, and only here and there appeared a thawed place where they could feed. Toward the end of this month they are plentiful, and their curious habits and loud notes make them among the most conspicuous denizens of the marshes. At the Yukon mouth, on May 28, I came across a female busily at work, preparing a little hollow in a tussock for her eggs, and as I drew near she moved a little to one side, and uttered a sharp, querulous note, as if protesting against the intrusion. We took the hint and left her; but a second visit, some days later, showed the spot deserted. These are very demonstrative birds in their love-making, and the last of May and first of June their loud cries are heard everywhere about their haunts, especially in morning and evening.

"Two or three males start in pursuit of a female and away they go twisting and turning, here and there, over marsh and stream, with marvellous swiftness and dexterity. At short intervals a male checks his flight for a moment to utter a strident peu é a wéet; wée-tōō, wée-too; then on he goes full tilt again. After they have mated, or when a solitary male pays his devotion, they rise 15 or 20

* "Birds of the North-West," p. 477.
† "Report upon Natural History Collections made in Alaska between the years 1877 and 1881," pp. 100, 101.
yards from the ground, where, hovering upon quivering wings, the bird pours forth a lisping but energetic and frequently musical song, which can be very imperfectly expressed by the syllables peet-peet; pee-ter-wée-too; wée-too; pee-ter-wée-too; pee-ter-wée-too; wée-too; wéewee-too. This is the complete song, but frequently only fragments are sung, as when the bird is in pursuit of the female.

"June 16, while crossing a tussock-covered hill-top, over a mile from any water, I was surprised to see a female of this species flutter from her nest about 6 feet in front of me, and skulk off through the grass with trailing wings and depressed head for some 10 or 15 yards, then stand nearly concealed by a tuft of grass and watch me as I pillaged her home of its treasures.

"The eggs, four in number (set No. 299), rested in a shallow depression formed by the bird's body in the soft moss and without a trace of lining. These eggs measure respectively 1·80 by 1·21; 1·70 by 1·20; 1·69 by 1·20; 1·72 by 1·23. A second set of four (No. 328), taken on lower ground, June 20, the same season, measure 1·80 by 1·22; 1·72 by 1·23; 1·87 by 1·24; 1·83 by 1·25, and set No. 222, from a boggy flat, but with no nest, except the dead grass naturally found on the place occupied, was taken June 13, the same season, and measures 1·73 by 1·23; 1·72 by 1·23; 1·70 by 1·22; 1·72 by 1·22. The ground-colour varies from a greenish clayey olive to a light grayish or clay color. The spots are large, well-defined, and scattered sparsely, except about the tip of large end, where they are crowded. These spots are dark umber-brown, and present a striking contrast to the ground-color. All the eggs mentioned above were fresh, but the young are full-grown and on the wing with their parents the last of July, and the first of August finds the adults rapidly changing their breeding-dress for that of winter, and gathering into flocks. By the first of September they are in perfect winter dress, and frequent muddy flats, the edges of tide-creeks, and other places, exactly as they do in their passage south or north in middle latitudes. They have the same unsuspicous ways here as there, and may be shot at again and again, as they keep about their wounded comrades. Not long after griseus and scolopaces were first distinguished many ornithologists reunited the two as inseparable, but lately Messrs. Ridgway and Lawrence, in the Nuttall Ornithological Club Bulletin for July, 1880, have adduced proof which must go far toward convincing the most sceptical of their difference.

"Having occasion in the preparation of this article to compare my Alaskan series with the specimens from various parts of the country in the National Museum collection, I find there is not the slightest difficulty in distinguishing the two birds except in very rare instances."
BROAD-BILLED SANDPIPER.

*Limicola platyrhyncha* (Temminck).
BROAD-BILLED SANDPIPER.

Scolopacidae.

LIMICOLA PLATYRHYNCHA (Temminck).

ExplanatioN of Plate.

Figure 1. Lapland, June 17, 1886.

The Broad-billed Sandpiper is a rare accidental visitor to England and Ireland, there being no record from Scotland.

Respecting the geographical distribution of the Broad-billed Sandpiper Mr. Howard Saunders writes as follows*:—"It is evident that our islands lie outside the ordinary route taken by this species; yet it breeds no further off than the fells of Scandinavia, and visits the coasts and inland waters of Denmark, Germany, France, and Switzerland. As yet it has not been noticed in the Spanish Peninsula, but in Italy its occurrences, though irregular, are not unfrequent, large flocks—which have probably made use of the Brenner Pass—sometimes alighting in the marshes of Venetia. From Finland and the tundras of European Russia, where it also nests, a more easterly line of flight brings it to the Black Sea and the Aralo-Caspian region, while it is found during winter in some parts of the Mediterranean basin, including the shores of North Africa as far as Egypt. Strange to say, it has not been met with by any explorers in the Arctic portions of Asiatic Siberia, but Severtzoff obtained a specimen on the Pamir, and the bird is common in winter on the coast of Sind. It occurs again on Lake Baikal, and commonly on the Sea of Okhotsk, visiting Japan, China, the Philippines, Burma, and Eastern India; while, after another great gap in its distribution, we find it at Madagascar, of course during the cold season."

The following valuable notes on the nidification of this species were

* 'Manual of British Birds,' pp. 563, 564.
communicated by the late Mr. Richard Dawn to the late Mr. Yarrell, who published them in his 'History of British Birds'**:—"This Sandpiper is by no means uncommon during the breeding-season in Lulea and Tornea Lapmark, frequenting grassy morasses and swamps in small colonies, generally in the same places as those frequented by the Totanus glareola, our Wood Sandpiper. It breeds also at Fokstuen on the Dovre Fjeld mountains, about three thousand feet above the level of the sea, in Norway, where it arrives at the latter end of May. On its first appearance it is wild and shy, and similar in its habits to the other species of the genus, feeding on the grassy borders of the small pools and lakes in the morasses. On being disturbed it soars to a great height in the air, rising and falling suddenly like the Snipe, uttering the notes two woo, which are rapidly repeated. As the weather becomes warm its habits totally change, skulking and creeping through the dead grass, and allowing itself to be followed within a few yards, and when flushed dropping again a short distance off. It seems to lay its eggs later than others of this tribe generally. I found the eggs not sat upon on the 24th of June, and the last week in July the young were unable to fly; a period when all the other Sandpipers are on the move south. The eggs were of a deep chocolate colour, and its nest, like that of the Snipe, was on a hummocky tuft of grass. Although I found the young only half fledged the last week in July, and hunted the morasses very carefully, I never flushed or saw a single old bird, yet undoubtedly they must have been there, so difficult is it at that period to get them on the wing, and so entirely different from their habits in the spring. They are undoubtedly numerous, but from their very small size and hiding habits are difficult to be discovered, added to the almost impassable nature of the swamps they frequent. There were several small colonies of them in different parts of the extensive swamp at Fokstuen; I procured five specimens there, and might have obtained as many more, had I desired it; I also procured one nest with four eggs in it."

The following notes, by the late John Wolley, were published in Hewitson's 'Eggs of British Birds'†:—"The Broad-billed Sandpiper differs from other wading birds in the situation of its nest, choosing open soft places in the marsh, where there is little else than bog moss with a light growth of a kind of sedge, and on a low tuft just rising above the water its nest may be found without much difficulty. . . .

"But it must not be supposed that this kind of bird-nesting is very easy

work. The marshes where the Broad-billed Sandpiper are to be found are few and far between, they are soft and full of water, and often, every step is a struggle, whilst the swarms of hungry gnats require almost individual attention. The sun is scorching at mid-day, but at midnight has not enough power to keep away an unpleasant chill. The country to be gone over is of vast extent, the egg season very short; sleep is seldom attainable, a feverish feeling comes on, and present enjoyment soon ceases.

"It is just when the thickest clouds of gnats rise from the water (which is so generally spread over the recently thawed land), that the Broad-billed Sandpiper has its eggs, and this is just before midsummer, about the third week in June.

"Many empty nests are found for one that is occupied, and I suppose them to be nests of former years, for the moss in which they are usually worked, long retains any mark made in it, being hard frozen for more than half the year; they are neatly rounded hollows, and have a few bits of dry grass at the bottom. The bird sometimes flies, and sometimes runs, off her eggs; and if she has sat for a day or two, she will come back even whilst men are standing all around. The eggs are usually very deeply and richly coloured when fresh, but they fade sadly soon after they are blown."

The late H. W. Wheelwright, who found a nest of this species in Lulea Lapland, writes as follows *:—"Of all the Sandpipers, this certainly is the most unobtrusive and shyest in its habits; and its custom of creeping among the grass like a little mouse, causes it to be very seldom seen. When flushed, which is never until you nearly tread upon it, it rises with a faint single call-note, flies for a very little distance, then suddenly drops, and it is next to impossible to get it up a second time without a dog. I only found one nest of this Sandpiper. It was in a high fell meadow, where I obtained so many of the Lap Buntings, and I shot both old birds. The eggs were four, very pyriform; ground colour, grey brown, covered all over with minute spots of light umber-brown, nearly hiding the ground colour; size, 1\(^\frac{1}{4}\) in. by 7\(^\frac{1}{8}\) in."

Mr. F. S. Mitchell, in his notes on "A Spring Tour in Norway," gives the following details respecting the nidification of this Sandpiper †:—"On the morning of June 9th we had started from Fokstuen station-house for an exploration of the hills on the other side of the marsh, and had not left it half-an-hour when a little Sandpiper, that I did not recognize, got up from under my

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† 'Zoologist,' 1877, p. 204.
feet, was shot, and, hurrah!—proved to be a Broad-bill! It was at once decided to leave the hills for the marsh, and thither we accordingly went. Before very long four eggs were found, and so one of the prizes we hoped to get was secured. This nest was not on a tump, but a damp, grassy place, in a dry spot almost level with the mud, and consisted of a round, deep hollow filled with dry leaves of the mountain willow, whose brown colour coincided almost exactly with that of the eggs. On the 11th, at another marsh half-way to Jerkin, on which there were no willows, we took four eggs from a nest composed of dry grass simply, and which was a slight depression on a small tump surrounded by water. The colour of these was very much lighter than the first, more like a Dunlin’s. Willow-leaves were not invariably used, even where they were plentiful, as was proved by a nest taken on the 14th from Fokstuen, composed solely of straws. Two others had both leaves and straws mixed, and the rest were like the first in this respect. It was curious that those nests lined with leaves contained the darkest eggs, and those with straws the lighter-coloured ones. The number was invariably four, and these were all fresh, or nearly so, in the seven nests we took, between the 9th and 15th. The open spaces of the marsh appeared to be preferred, where it was free from bushes, and the ground very soppy and wet. The birds in all cases were very tame, would not get off the nest till nearly trodden on, alighting only a few yards away, and running about among the tumps with an occasional subdued half-chirp half-whistle. The male is never far away, always ready to join his mate if she leaves the nest.”

In some further notes on this species communicated to Mr. J. A. Harvie-Brown, and published by Mr. Dresser in his ‘Birds of Europe’ *, Mr. Mitchell states that “the nests are more elaborate than most of the Sandpipers’, scratched deeper down, and more carefully lined.”

The Rev. H. H. Slater, in his “Field Notes in Norway in 1882,” writes as follows respecting this species †:—“Pretty plentiful at Fokstuen, and just below the station at Hjerkin. I did not find the nest, nor did the ovary of a female I procured at Fokstuen lead me to suppose I should, though at Hjerkin—which, both in Ornithology and Botany, is decidedly earlier than Fokstuen, although the places are, as near as possible, at the same altitude (the ornithologist will do well to take Hjerkin first)—one contained an egg which would have been laid in a few days. They are not easy to shoot, as they have a perplexing way of rising at your feet in a great hurry, and flying off as if they meant to go for miles, and

† ‘Zoologist,’ 1883, p. 50.
then, just as they are at a right distance to kill, dropping down suddenly, and causing you to shoot thereby over their heads. They frequent grassy and sedgy parts of the marsh, where the ground is neither too wet nor the vegetation too high, never being seen actually in the water or amongst bushes, but where the soil is such that an ordinary man's foot would sink a couple of inches into the mud at each step. They lie, usually, very close, rise with a low but shrill whistle, and almost invariably are in pairs; in wet and windy weather, however, like most other birds, they become very wild, and I have seen them at such times go through the same motions as a drumming Snipe, the descending motion with quivering wings being accompanied by a high tremulous whistle. Those shot at Fokstuen have a slight rufous tinge in the breast, due to the iron oxide in the wet soil they frequent."

Referring to this Sandpiper Prof. Collett writes *:-"The extensive swampy tracts near Fokstuen, on the Dovre, are the oldest and best known habitat of this bird in Norway. It is, however, a rather common bird on all the fells in the southern parts of the country. On the Dovre, I have found it every season for some years past resident on stretches of exceedingly marshy ground, with a sparse overgrowth of Carices. Their numbers, however, are anything but great. In June 1838, Mr. Lagesen 'succeeded in killing' 26 of these birds, and in taking as many nests; but this would be hardly possible at the present time.

"When searching for food, they hurry hither and thither, with nodding head and bill pointing obliquely to the ground. If flushed, they will utter a few mellow, flute-like tones, at intervals mingled with a harsher note. . . .

"A nest found hereabouts, on the 9th June 1872, contained 4 eggs, which had been sat upon for about eight and forty hours. It was lined with a few straws, and located in one of the most swampy spots, the eggs being half immersed in the cold water. The eggs measured from 32 to 33 by 22 mm. [1.26 to 1.30 inch by .86 inch]; on a whitish ground they are thickly covered with reddish brown spots, which collect and form a zone at the bigger end. One of the eggs was lighter (the spots less numerous) than the rest. The old birds kept in the neighbourhood of the nest and displayed considerable anxiety. Incubation-spots were found in both sexes.

"The breeding time would appear to be about the middle of June, fresh eggs have, however, been found as late as the 24th June, and young birds not fully fledged at the end of July (by Mr. Dann)."

* 'Remarks on the Ornithology of Northern Norway'; p. 75.
Mr. Seebohm states that the eggs of this species "vary in length from 1·38 to 1·25 inch, and in breadth from .95 to .87 inch." *

Mr. H. E. Dresser states that a series of nearly thirty eggs of this species in his collection, all obtained in Lapland, measure from 1·25 by .92 inch to 1·22 by .85 inch. †

DUNLIN.
Tringa alpina, Linnaeus.
SCOLOPACIDÆ.

TRINGA ALPINA, LINNÆUS.

Explanation of Plate.

Figure 1. Tain, N.B., May 19, 1890.


" 5. Tain, N.B., June 13, 1891.


" 7. Ditto. June 8, 1892.


The Dunlin is a spring and autumn migrant, but numbers are resident in the British Islands throughout the year.

Mr. Howard Saunders writes as follows respecting the distribution of this species in the British Islands *:—"The Dunlin is the most numerous of the Sandpipers which frequent our shores and tidal rivers, where it may be found throughout the year; for although many of the adults retire inland for nesting-purposes, their place is taken in summer by immature birds. Its favourite breeding-quarters are wild and often elevated moorlands, which are comparatively rare in the south of England; but nests have been found in Cornwall and Devon, and I have seen the young hardly able to fly on Exmoor in Somerset. Satisfactory evidence is wanting as regards Wales †, but the species breeds sparsely in the

* 'Manual of British Birds,' p. 569.
† [Since this was written the Dunlin has been discovered breeding in Cardiganshire by Mr. J. H. Salter, and in Merionethshire by Mr. H. S. Davenport (see pp. 5, 6).—F. P.]
marshes of the Dee in Cheshire, more freely in Lancashire and Yorkshire, and in some numbers on the mosses on both sides of the Solway; while on the east side its eggs have been obtained in Lincolnshire, and a few pairs are scattered over the moors further north, up to the Cheviots. In Scotland, where suitable situations are abundant, the bird is generally distributed on the mainland—though local in Sutherland, and is rather plentiful on many of the islands as far as the Shetlands. As regards Ireland, it is only known to nest—in small numbers—in the north-west, but in autumn and winter it frequents the coasts in thousands."

Maegillivray writes *:—"The Dunlins in fact breed in great numbers on the heaths of many parts of Scotland, and its larger islands, where they may be found scattered in the haunts selected by the Golden Plovers, with which they are so frequently seen in company that they have popularly obtained the name of Plover's Pages. Sometimes about the middle of April, but always before that of May, they are seen dispersed over the moors in pairs like the birds just named, which at this season they greatly resemble in manners. From this period until the end of August none are to be found along the shores of the sea, instead of searching which, they now seek for insects and worms, in the shallow pools, soft ground, and by the edges of lakes and marshes. The male frequently flies up to a person intruding upon his haunts, and sometimes endeavours to entice him away by feigning lameness.

"The nest, which is composed of some bits of withered grass or sedge, and small twigs of heath, is placed in a slight hollow, generally on a bare spot, and usually in a dry place like that selected by the Golden Plover. The eggs, always four, are ovato-pyriform, an inch and four- or five-twelfths in length, eleven-twelfths or a little more in breadth, and have a light greyish-green, or sometimes greenish-yellow, or brownish ground, irregularly marked all over with spots and patches of umber-brown and light purplish-grey, more numerous toward the larger end, where they are often confluent. The female sits very assiduously, often allowing a person to come quite close to her before removing, which she does in a fluttering and cowering manner.

"The young, which are covered with close stiffish down, are variegated with yellowish-grey and dark brown, with the bill dusky, and the feet yellowish-brown. Like those of the Golden Plover and Lapwing, they leave the nest immediately after exclusion from the egg, run about, and when alarmed, conceal themselves by sitting close to the ground, and remaining motionless. If at this period a person

approaches their retreat, the male especially, but frequently the female also, flies up to meet the intruder, and uses the same artifices for deceiving him as many other birds of this family. After they are able to shift for themselves, the young remain several weeks on the moors with their parents, both collecting into small flocks, which are often intermingled with those of the Golden Plover, and often in the evenings uniting into larger.”

The late Dr. Saxby describes the breeding-habits of this species as follows * :— "The breeding haunts of the Dunlin are precisely similar to those of the common Snipe; the same situations are also chosen for the nest, and, of course with the exception of their inferior size, both nests and eggs closely resemble those of that bird. It does not, however, breed so late, the last eggs usually being seen about the beginning of July, and the earliest in the middle of May. Sometimes, but not often, the nest is found upon the tops of the highest hills; those only a few hundred feet above the sea-level are preferred. The vicinity of water in some form seems to be necessary; and although it sometimes happens that there is none within perhaps a quarter of a mile of the nest, the bed of a recently dried up pool or stream will always be found near. When a Dunlin is nearly hatching and is suddenly disturbed, she flies off the nest, and alighting almost immediately, runs trailing the wings, and uttering a peculiar shrill cry. When the danger appears to be over, she returns by running until within about twenty yards of the nest, and then, after pausing awhile, and looking round upon all sides, flies the remaining distance. In the breeding season these birds have a singular habit of hovering at a considerable height—perhaps ten or fifteen feet—above the ground, at the same time quivering the wings and uttering a sort of shrill but gentle warbling sound.”

Messrs. Macpherson and Duckworth give the following description of the breeding habits of the Dunlin on Rockliffe Marsh, Cumberland † :— "The Dunlin is a later breeder than the Redshank, and though Mr. C. Murray Adamson once found four young Dunlins on Burgh marsh, on May 20th, it is not until the beginning of May that the breeding birds repair in any numbers to Rockliffe marsh for nesting purposes.

"Upon the salt marshes, the nest is chiefly embedded in a tussock of long coarse grass, the blades of which are often drawn carefully over the nest; but, on Rockliffe marsh, many nests are placed among the blushing sea-pinks which cover the northern portion of the ground. At first, the nest is a mere depression

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† ‘Birds of Cumberland,’ pp. 147–149.
in the soil, with little if any lining; but a lining of fine stems is carefully added as laying proceeds.

"Upon the coastline, the eggs are chiefly laid early in May; but on the east fells incubation is rather later, and we have found fresh eggs as late as the middle of June.

"Dunlins exhibit considerable anxiety about their nest, if incubation be advanced; and it is interesting to watch the little birds flying round an intruder, uttering a gentle trill, or alighting on the ground to run nimbly for a few paces. Some birds sit very close indeed, and may be captured on the nest. The last Dunlin's nest which we found during the summer of 1885 was on Wedholme flow, June 6th. We were searching for the eggs of a pair of Great Black-backed Gulls, which were sailing magnificently overhead, uttering measured imprecations, when the sharp cry of the startled Dunlin arose, and we saw the bird going away. There, sure enough, on a little dry knoll of heather, surrounded on all sides by boggy ground, was a Dunlin's nest, lined with a few straws, and containing four rich-coloured eggs, all much incubated.

"It often happens that some days elapse between the laying of the first egg of a clutch and the second; indeed Mr. A. Smith informs us, that he has known thirteen days elapse between the laying of the first two eggs.

"But while the majority of Dunlin lay on our marshes at the beginning of May, laying again and again if their first clutches be robbed or destroyed by a high tide, large flocks may be observed on the coast at the same time. Thus on May 8th we observed a flock composed of about a hundred Dunlin and nearly as many Ringed Plovers, on the coast at Bowness. As soon after daylight as the tide had retired sufficiently to allow of their feeding, they scattered over the mud exposed, and the twitter of the Dunlins, repeated at intervals by the whole flock, created a sort of running murmur, very grateful to an ornithologist."

Mr. Abel Chapman writes as follows respecting the nesting of the Dunlin on the Border moors between England and Scotland *:—"May 8th . . . . The Dunlins must have eggs now—a week ago their actions showed they had already laid—but on the immense extent of ground, it is all but impossible to discover their nests. Their most favoured haunts are some wide tussocky flow, far out on the hills, and perhaps a mile in circuit. This great flat area is occupied by perhaps but a single pair of Dunlins; hence the difficulty of detecting the exact site of the nest is obvious. To attempt to watch the birds on to it is vexation of spirit. They are so ridiculously tame, running unconcernedly around, almost

within arm's length, 'purring' the while in their peculiar fashion, that one imagines the nest must be close at hand. Then after lying patiently watching them, for perhaps half an hour, up goes the Dunlin with a little wild pipe, and flies right out of sight. I have seen them year after year in spots where they certainly do not breed, perform all their presumptively breeding antics, as though gratuitously to deceive one. It will thus be seen that though, in the aggregate, a good many Dunlins nest on the Border moors, yet being scattered widely about in single pairs, they are easily overlooked."

Speaking of the breeding of this species on the Solway Marshes, Mr. Chapman further writes* :— "Both the species just mentioned [Redshank and Dunlin] breed in some numbers on the great marshes of the Solway, and may there be much more readily studied than on the highlands of Northumberland. These marshes are of great extent—for many miles a dead flat, grassy expanse, hardly raised above sea-level, and intersected by muddy channels and creeks of salt water—a very different region to that frequented by the Dunlins on the moors. . . . .

"They [Dunlins] build a slight nest, like a Skylark's, but there is little attempt at concealment. They usually run from their eggs on being disturbed, and as they have perhaps gone several yards before being perceived, one is apt to be deceived in not finding any nest at the spot where the old birds, by their actions, lead one to expect it."

Mr. J. H. Salter, who discovered the Dunlin breeding in Wales, writes† :— "As the Dunlin, Tringa alpina, is known to nest in Cornwall and Devon, it is a little remarkable that the fact of its breeding in Wales has not hitherto been satisfactorily established. I found it last summer [1892] frequenting a large heather-grown peat bog in Cardiganshire, some twelve miles from the sea. When at the same locality this year [1893], on May 13th, a small wader rose, with the Dunlin's weak note, and, shuffling along to attract attention, showed the black breast and chestnut mantle of that bird. The four eggs were typical Dunlin's eggs, smaller than those of the Snipe, and with greener ground colour. Another pair, on May 24th, evidently had young ones hidden amongst the rushes, and must have bred in the neighbouring peat-mosses."

Through Mr. Salter's kindness I am enabled to figure one of the eggs above referred to. (Figure 4.)

Another instance of the Dunlin breeding in Wales is recorded by Mr. H. S.

† 'Zoologist,' 1893, p. 269.
Davenport, who found a nest of this species containing four eggs on a moorland lying midway between Llanuwchyllyn and Trawsfynydd, Merionethshire, on May 29th, 1895. *

Mr. H. Seebohm states that the eggs of the Dunlin "vary in length from 1·4 to 1·2 inch, and in breadth from 1·0 to .9 inch." †

Mr. H. E. Dresser says that the eggs of this species measure from 1·2 by .95 inch to 1·4 by .95 inch, and 1·37 by 1·0 inch. He further states that he was informed by the late Mr. Benzon, that the latter, who had often taken the eggs in Denmark, possessed a large series measuring from 1·49 by 1·02 inch to 1·26 by .86 inch. ‡

* 'Zoologist,' 1895, p. 275.
† 'History of British Birds,' vol. iii, p. 186.
‡ 'History of the Birds of Europe,' vol. viii, p. 27.
SANDERLING.

Calidris arenaria (*Lumnau*).

Litho Wilhelm Greve, Fuchs
SANDERLING.
Scolopaci.de.]
CALIDRIS ARENARIA (LINN.EUS).

EXPLANATION OF PLATE.

Figure 1. Arctic Coast, Barren Grounds, Anderson River, June 29, 1863; R. MacFarlane coll. No. 9383 U.S. National Museum Collection.

2. Grinnell Land, lat. 82° 33', June 24, 1876; Col. Feilden coll. Natural History Museum, South Kensington.

3. Iceland, 1875; W. Proctor. (Seebohm Collection.) Natural History Museum, South Kensington.


The Sanderling is a regular spring and autumn migrant to the British Islands, a few birds remaining throughout the winter in some districts.

Mr. Howard Saunders writes*: — "To the Færoes the Sanderling is a somewhat rare migrant, but it undoubtedly nests in some districts of Iceland; and ten eggs were obtained by the German expedition on Sabine Island, East Greenland, while on the west side nestlings have been captured near Godthaab, and also in 81° 38' N. by Dr. Bessels of the 'Polaris.' Col. Feilden shot a male from two eggs in lat. 82° 33' on June 24th, 1876, in Smith Sound, where the bird was not uncommon; Sabine has recorded it as breeding freely on the Parry Islands; and Mr. MacFarlane killed a female from the first authenticated eggs on the barren-grounds near Anderson River. Westward, it ranges to North Alaska, and, following up its circumpolar distribution, it has been found on the Liakov Islands, Taimyr Peninsula, Yenesei delta, Waigats, and Novaya Zemlya, and probably breeds near the mouth of the Petchora. Except in the Baltic, where it is scarce, the Sanderling is tolerably common on passage along the coasts of Europe and of the Atlantic Islands, a certain number wintering in the basin of the Mediterranean, while others continue southward to Cape Colony and Natal; it is plentiful from the Persian Gulf to Ceylon, Borneo, and Java, and visits

* 'Manual of British Birds,' pp. 583, 584.
China, Japan, the Kurils, and the Hawaiian Islands. In America, south of its summer-haunts, it is found down to Patagonia and Chili."

Mr. MacFarlane writes as follows with reference to his discovery of the eggs of the Sanderling:—“On 29th June, 1863, we discovered a nest of this species, the only one at that time known to naturalists; on the Barren Grounds, about 10 miles west of Franklin Bay. The nest was composed of withered hay and leaves placed in a small cavity or depression in the ground, and it contained four eggs, which were quite fresh. The female was snared. It is a very rare bird in that quarter, and we never afterwards succeeded in finding another nest.”

The late Dr. Brewer gives the following description of two of the eggs obtained by Mr. MacFarlane:—“The two eggs in the Smithsonian Collection (No. 9383) measure, one 1·44 inches in length by 0·95 in breadth; the other, 1·43 by 0·99. Their ground-color is a brownish olive, marked with faint spots and small blotches of bistre. These markings are very generally diffused, but are a little more numerous about the larger end. They are of an oblong pyriform shape.”

Colonel H. W. Feilden gives the following description of his discovery of the eggs of this species:—“I first observed this species in Grinnell Land on the 5th June, 1876, flying in company with Knots and Turnstones; at this date it was feeding, like the other Waders, on the buds of Saxifraga oppositifolia. This bird was by no means abundant along the coasts of Grinnell Land; but I observed several pairs in the aggregate, and found a nest of this species containing two eggs in lat. 82° 33' N., on 24th June, 1876. This nest, from which I killed the male bird, was placed on a gravel ridge, at an altitude of several hundred feet above the sea, and the eggs were deposited in a slight depression in the centre of a recumbent plant of arctic willow, the lining of the nest consisting of a few withered leaves and some of the last year's catkins. 8th August, 1876, along the shores of Robeson Channel, I saw several parties of young ones, three to four in number, following their parents, and led by the old birds, searching most diligently for insects. At this date they were in a very interesting stage of plumage, being just able to fly, but retaining some of the down on their feathers.”

In his "Notes from an Arctic Journal," Colonel Feilden gives the following

‡ "List of "Birds observed in Smith Sound and in the Polar Basin during the Arctic Expedition of 1875-76," - Ibis," 1877, p. 406.\n
additionl details respecting his discovery of this nest*:—"Whilst walking
along some old gravel beaches, at a height of some 800 feet above the sea, I saw
a Sanderling running like a mouse amongst the stones. Throwing myself flat
on the ground, I watched the bird circling round and round, until at last it
returned to near the very spot where I had first observed it moving. The
nesting-place was a depression in the centre of a plant of *Salix arctica*, and
was lined with a few dried leaves and catkins of the plant; the eggs, two in
number, may be compared to miniature Curlew's, but the ground colour is not so
green. The sitting bird proved on dissection to be the male."

* "Zoologist," 1879, p. 104.
SPOTTED SANDPIPER.

Totanus macularius (Linnaeus).
SPOTTED SANDPIPER.

Scolopacidae.

TOTANUS MACULARIUS (Linneus).

Explanation of Plate.

Figure 1. Toronto Island, Ontario, June 4, 1886.
    2. Ontario, June 12, 1889.
    3. Old Saybrook, Connecticut, June 1, 1891.
    4. Petersburg, Michigan, May 20, 1891.
    5. Ontario, July 2, 1887.
    7. Rutland, Virginia, June 11, 1890.

This American species is a very rare visitor to England and Scotland.

Referring to the distribution and breeding of this Sandpiper in North America, Dr. Coutes writes*:—"Although reaching high latitudes, such as that of the Yukon, this little species, unlike most of its allies, breeds with equal readiness almost throughout the country, and is one of the best known and most abundant of its tribe. It nests in a field or orchard, generally near water, laying four creamy or clay-coloured eggs, blotched with blackish-brown and neutral tint. From the Southern States, where it spends the winter, as it also does much further south, it reaches the Middle districts about the 15th of April, and is found along the streams and ponds of the interior, as well as on the coast. Many stop to breed all along the line of migration, while others pass on at least to Labrador. Eggs may be found all through June and July, according to latitude, and perhaps in some cases more than one brood may be raised.

"According to Mr. Trippe, in the mountains of Colorado this is the only species of its family that is abundant throughout the summer. It arrives at Idaho Springs early in May, leaving in September. It pushes up all the larger streams to an altitude of 8000 or 9000 feet, and even, occasionally, to the shores of the lakes near the timber-line."

The late Dr. T. M. Brewer writes as follows respecting the nesting habits of this species*:—"The nests of this bird vary in their position and construction. As far as I have noted them, they have been in some small depression in the ground, often sheltered by being placed near a small bush or in a tuft of grass. They are, for the most part, built in the dry open field, never very far from water. Usually they are of very simple structure, being made of dry bent, and answering the purpose of protecting the eggs from the damp ground, but rarely so well interwoven as to bear removal. Mr. Audubon states that the nests of this bird found by him on an island in the Gulf of St. Lawrence were much more bulky, and more neatly constructed, than any seen by him farther south, yet not to be compared with those he had seen in Labrador, where they were concealed under ledges of rocks and were made of dry moss, raised to the height of several inches, and well finished within with slender grasses and feathers of the Eider Duck. The time of nesting varies three months from Texas to Labrador. On Buffalo Bayou in Texas, Audubon found full-grown broods on the 5th of May. In Newfoundland they were only just fledged on the 11th of August.

"The young run about with remarkable ease and swiftness almost as soon as they are out of their shell. When danger approaches they immediately, upon an alarm-signal from their parents, run and hide themselves, squatting close to the ground, and there remaining perfectly immovable, resembling a small drab-coloured stone with a single streak of black down the middle. If the young bird finds itself discovered, and an attempt is made to take it, it runs with great celerity, uttering the most plaintive cries, and at the same time the parents exhibit symptoms of distress and counterfeit lameness with great skill..."

"The eggs are always four in number, and are of a rounded pyriform shape, varying in length from 1.21 inches to 1.35, and in breadth from .95 to 1.00 inch. Their ground-color varies from a light drab to a dark cream, sometimes tinged with rufous, and occasionally with a muddy clay-color. The markings in some are fine dottings, and in others large and confluent blotches about the larger end. The color of the markings is a rich sepia-brown, with a slight purplish tinge."

Audubon gives the following interesting narrative respecting this species†:—"My esteemed friend Thomas Macculloch of Pictou, Nova Scotia, having transmitted to me a curious account of the attachment of one of these birds to her eggs, I here insert it with pleasure: 'Being on an excursion to the Hardwood Heights, which rise to the west of Pictou, my attention was attracted by the

* 'Water Birds of North America,' vol. i. p. 304.
† 'Ornithological Biography,' vol. iv. p. 84.
warble of a little bird, which appeared to me entirely new, and which proceeded from a small thicket a short way off. Whilst crossing an intervening meadow, I accidentally raised a Spotted Sandpiper from its nest, and having marked the spot I hastened forwards; but the shyness of the object of my pursuit rendered all my efforts unavailing, and returning to the nest which I had just left, I expected to find it still unoccupied; but the Sandpiper had again resumed her place, and left it with great reluctance on my near approach. The nest contained four eggs, which I determined to remove on my return at night, and for the purpose of preventing the bird sitting again upon them, I placed a number of stones in a slanting position over the nest, and so close that it was impossible for the bird to get into it. On my return in the evening, however, I observed the little creature rise from beside the stones apparently in greater trepidation than ever, and more anxious to draw me away by the exhibition of all those little arts which they practise for this purpose. On examining the spot I was very much surprised to find that the poor thing had not only hollowed out a new nest, but had actually succeeded in abstracting two eggs from the other nest. How the bird had contrived to remove the eggs I cannot conceive, as the stones remained unaltered. This attachment to its nest and eggs appeared to me more singular as the bird had just commenced incubation, the eggs exhibiting very little appearance of the young.'

Describing the habits of the Spotted Sandpiper Wilson writes*:—"This very common species arrives in Pennsylvania about the twentieth of April, making its first appearance along the shores of our large rivers, and, as the season advances, tracing the courses of our creeks and streams towards the interior. Along the rivers Schuylkill and Delaware, and their tributary waters, they are in great abundance during the summer. This species is as remarkable for perpetually wagging the tail, as some others are for nodding the head; for whether running on the ground, or on the fences, along the rails, or in the water, this motion seems continual; even the young, as soon as they are freed from the shell, run about constantly wagging the tail. About the middle of May they resort to the adjoining cornfields to breed, where I have frequently found and examined their nests. One of these now before me, and which was built at the root of a hill of Indian corn, on high ground, is composed wholly of short pieces of dry straw. The eggs are four, of a pale clay or cream color, marked with large irregular spots of black, and more thinly with others of a paler tint. They are large in proportion to the size of the bird, measuring an inch and a quarter in

* 'American Ornithology' (1813), vol. vii. pp. 60, 61.
length, very thick at the great end, and tapering suddenly to the other. The young run about with wonderful speed as soon as they leave the shell, and are then covered with down of a dull drab color, marked with a single streak of black down the middle of the back, and with another behind each ear. They have a weak, plaintive note. On the approach of any person the parents exhibit symptoms of great distress, counterfeiting lameness, and fluttering along the ground with seeming difficulty. On the appearance of a dog, this agitation is greatly increased; and it is very interesting to observe with what dexterity she will lead him from her young, by throwing herself repeatedly before him, fluttering off, and keeping just without his reach, on a contrary direction from her helpless brood. My venerable friend, Mr. William Bartram, informs me, that he saw one of these birds defend her young for a considerable time from the repeated attacks of a ground squirrel. The scene of action was on the river shore. The parent had thrown herself, with her two young behind her, between them and the land; and at every attempt of the squirrel to seize them by a circuitous sweep, raised both her wings in an almost perpendicular position, assuming the most formidable appearance she was capable of, and rushed forwards on the squirrel, who, intimidated by her boldness and manner, instantly retreated; but presently returning, was met, as before, in front and on flank by the daring and affectionate bird, who with her wings and whole plumage bristling up, seemed swelled to twice her usual size. The young crowded together behind her, apparently sensible of their perilous situation, moving backwards and forwards as she advanced or retreated. This interesting scene lasted for at least ten minutes; the strength of the poor parent began evidently to flag, and the attacks of the squirrel became more daring and frequent, when my good friend, like one of those celestial agents who in Homer's time so often decided the palm of victory, stepped forward from his retreat, drove the assailant back to his hole, and rescued the innocent from destruction.”
COMMON REDSHANK.
Totanus calidris (Linnaeus).
COMMON REDSHANK.

TOTANUS CALIDRIS (Linnæus).

Explanation of Plate.

Figure 1. Rockcliffe Marsh, Cumberland, May 5, 1892.
,, 2. Westmorland, May 19, 1881.
,, 4. Cumberland, April 21, 1890.
,, 6. Cumberland, April 26, 1889.
,, 7. St. Ola, Rendall, Orkney, May 10, 1893.
,, 10. Westmorland, May 19, 1881.
,, 12. Ireland, May 22, 1883.

In collection of H. Massey, Esq.

The Redshank is a common resident in the British Islands, but is also migratory in the spring and autumn.

Mr. H. Seebohm writes *:—"The Redshank is one of the commonest and best known of all the Waders found in the British Islands. It is a resident, frequenting almost all parts of the coasts in autumn and winter, and retiring more or less inland in summer, at which season it is generally distributed, though somewhat local. It breeds in all suitable districts in England, especially in the low-lying eastern counties; and in Scotland it is even more numerous, extending to the Hebrides, the Orkneys, and the Shetlands. In the latter islands it is, however, only sparingly met with in the breeding-season. It is a common bird in Ireland, frequenting the coast in winter, but retiring inland to breed. . . .

"In consequence of the reclamation of so many of its favourite breeding-grounds, the draining of marshes, and the cultivation of swampy wastes, the Redshank is less numerous in summer in England than was formerly the case.

In autumn the coasts swarm with this bird, migrants from more northern breeding-places; but in spring the majority are compelled to leave, not being able to find a suitable summer residence. This bird seems much attached to its quarters, and often stays to breed in cultivated districts if they happen to be flooded. In some places they return regularly to rear their young in their ancient home, even though the marshes have given place to fields, and green crops have replaced the reeds, rushes, and other swamp vegetation of former years.

"The breeding-season of the Redshank commences in April, and fresh eggs may be obtained from the beginning of that month to near the end of May. Saxby says that in Shetland he has never seen the eggs earlier than the 13th of May. In Northern Europe the laying-season is later; and I have taken fresh eggs on the 22nd of June in the extreme north of Norway. The Redshank is a very sociable bird during the breeding-season, and numbers of its nests may be found in a small area of suitable ground. In the pairing-season the cock bird often soars into the air, and serenades his mate with a trilling sound, or amorously displays his charms by bowing and strutting, opening and closing his wings, and spreading his tail. At this season he sometimes alights on trees or even a post; and Stevenson records instances of a bird of this species performing various manoeuvres of courtship as he ran along the top rail of a gate. The site of the nest is on the ground, often in the centre of a grass tuft, or beneath the shade of a tall weed or little bush of heather. The nests are generally cunningly concealed, and arched over by the surrounding herbage, which falls in natural pendants over them. Sometimes a site is chosen amongst the drifted rubbish above high-water mark. The nest is very slight: in many cases the centre of the tuft is trodden down into a receptacle for the eggs, but at other times a few dead bents, straws, or scraps of moss, heath, or reed are placed as a lining to the selected hollow. The eggs are four in number, rather large for the size of the bird, and pyriform in shape. They vary in ground-colour from very pale buff to rich ochaceous buff, and are spotted and blotched with rich dark-brown surface-markings, and with underlying spots of paler brown and grey. On some eggs a few streaky lines of dark brown are pencilled on the large end. Most of the large markings are on the large end of the egg, and some specimens are more finely and handsomely spotted than others. They vary in length from 1·9 to 1·65 inch, and in breadth from 1·3 to 1·17 inch. They are not easily confused with the eggs of any other British bird, being yellower in colour than those of the Ruff or Great Snipe, which they somewhat resemble. Only one brood appears to be reared in the year."

Mr. H. E. Dresser states that a fair series of eggs of this species in his
collection, taken chiefly by himself in Finland, measure from 1·72 by 1·2 inch to 1·65 by 1·12 inch.*

Colonel W. Vincent Legge has published the following interesting notes on the nesting habits of the Redshank in South-east Essex †:—“The Redshank lays somewhat earlier than the Peewit. I found the first eggs (three in one nest) on the 7th of April. They are very clamorous birds, quitting their nests when one is yet a long way off, and thus rendering them difficult to find. No bird that I have seen conceals its nest so cleverly as this one: it is formed in the centre of a green tuft of grass. The herbage is beaten down to form at once the lining and the bottom of the nest, and the surrounding blades are carefully bent over the top, completely hiding the nest from view. The bird enters and leaves it at the side, closing up the openings when frightened from it. The only traces of the nest are a few tracks in the surrounding grass, where the bird has entered and departed from it. A shepherd said to me, ‘I always knows, sir, there’s a Tooke’s nest in the grass when I sees these ’ere little roads in it.’ The eggs, as far as I have observed, are always four in number, but they vary much in character: they are mostly of an ochre-yellow or a greenish yellow ground, with bluish grey spots, and then blotted all over, especially at the larger end, with sepia: they are not so thick as the eggs of the Peewit, measuring from one inch nine lines to one inch eleven lines by one inch three lines. The latter I have found one inch six lines in breadth, and they are more pointed. One clutch of Redshank’s eggs had the ground greenish white, with minute specks of brown over the whole surface, and then large blotches and clouds of sepia round the larger end: these were very much pointed, and the shells were very thin.”

The late Mr. E. T. Booth writes ‡:—“Redshanks usually return to their breeding-haunts on the Norfolk marshes early in March: the 3rd is the earliest date on which I have noted a pair or two showing themselves in the vicinity of their summer quarters. The marshmen usually look upon the return of the Redleg as one of the first signs of spring. In several of the Highland glens I remarked the birds were seldom seen till a month or five weeks later; but when once they make their appearance, nesting-operations are speedily commenced. The date at which eggs are laid varies with the season. In the broad-district in the east of Norfolk, I noticed in 1883 that the majority of the birds had their full complement of eggs by about the 22nd of April; the weather at the time was cold with cutting east winds, and it is probable they were a few days later than usual.

* 'History of the Birds of Europe,' vol. viii. p. 162.
† "Oological Notes from South-east Essex," ' Zoologist,' 1867, p. 602.
‡ 'Rough Notes on Birds observed in the British Islands, vol. ii.'
The Redleg commonly selects the centre of a tuft of rushes about sixteen or twenty inches in height in which to scrape out the small circular depression that forms its cradle: either a few blades of soft dead grass are added, or the weaker strands are broken down and thus supply a scanty lining. The long rank marsh-grass that grows about the roots of the surrounding rushes frequently meets over the eggs and forms a covering that effectually conceals them in the absence of the parent bird. Unless carefully examined, it is difficult to ascertain where the bird enters or leaves the nest, so closely do the strands of waving grass entwine above the space: at times a track may be detected among the grass and herbage; but doubtless the bird is able to force its way through the unresisting covering without leaving the slightest trace. Though apparently concealed so as to defy detection, scarcely a nest escapes the practised eye of the marshman, who has learned his trade by working every spring to supply the market."

Referring to the nesting of this species on Rockcliffe Marsh, Cumberland, Messrs. Macpherson and Duckworth write as follows *:—"Upon Rockcliffe, where the Redshank has nested in increasing abundance of late years, the nest is usually a saucer-like depression in a thick tussock of coarse grass, slightly lined, and carefully concealed. The nests are generally placed a considerable distance apart. The eggs, four of which constitute a clutch, are laid in April, generally from the middle to the end of the month. If a Peewit's egg be substituted for that of the Redshank, the old female will complete the clutch, but if the first egg be taken and no Peewit egg exchanged, she deserts the nest, and forms a new one. The young readily conceal themselves, but their whereabouts may be guessed by the anxiety of the parent birds, which wheel to and fro in loud dismay, uttering their prolonged call-note, which is peculiar to the breeding season."

Mr. Abel Chapman writes †:—"The Redshank is another bird whose nest is rarely found on the moors, by reason of the sparse and scattered distribution of the breeding pairs, and the elaborate concealment of the nest. These do not, like the Dunlin, breed high up on the fells, but prefer the rushy fields of the lower grounds and small patches of bog. . . .

"Though the birds were abundant enough on the Solway marshes, there are few nests so difficult to find as that of a Redshank. She hollows out some thick tuft of coarse grass, the tops of which, twined together, completely hide the nest from view. There is merely a sort of tunnel leading transversely through the tuft, which serves for entrance and exit, and her long neck enables the sitting bird

* 'Birds of Cumberland,' p. 158.
† 'Bird-life of the Borders,' pp. 39, 40.
to observe afar the approach of danger, on which she at once slips silently away. Mere casual search is therefore utterly useless; it is necessary that the eye should instantly detect the bird as she springs from her nest—no easy matter at perhaps 100 or 200 yards' distance, and when the air is filled with Peewits and other birds wheeling about. Then, when one does succeed in detecting the movement at the exact moment, there still remains the difficulty of marking the precise spot on so bare and featureless a place."

Mr. T. E. Buckley, in his notes "On the Birds of the East of Sutherland," writes as follows respecting this species*:—"Common the whole year round, and coming up the strath to breed. I used to take their eggs in a meadow at Balnacoil, about a mile from the house, where there were always several pairs breeding. The nest seems to be invariably placed in a tuft of grass, and like the Peewit, several nests are made before they finally fix on one in which to lay. They are very difficult to find, and during the time they are laying the birds never appear near the nest. The eggs are not laid on four consecutive days. When they go far up the hill to breed, I have generally noticed that they keep near any green spot, and do not nest in heather like the Greenshank."

* 'Proceedings of the Natural History Society of Glasgow,' vol. v. part 1, p. 144.
BLACK-TAILED GODWIT.
Limosa belgica (J. F. Gmelin).
BLACK-TAILED GODWIT.

Scolopacidae.

LIMOSA BELGICA (J. F. Gmelin).

EXPLANATION OF PLATE.

Figure 1. Dommelen, North Brabant, May 2, 1890.
,, 2. Astrakan, May 4, 1892.
,, 3. Neer, Holland, June 1, 1892.
,, 4. Valkenswaard, North Brabant, May 10, 1892.

In collection of H. Massey, Esq.

The Black-tailed Godwit is an irregular spring and autumn migrant to the British Islands, a few birds occasionally occurring in winter.

Referring to the geographical distribution of this Godwit, Mr. Howard Saunders writes *:—“At the present day this species is chiefly a visitor to our islands on the spring and autumn migrations, a few individuals being sometimes observed in winter; but down to the year 1829 it used to breed in the fens of Lincolnshire and the Isle of Ely, while eggs were taken in Norfolk as recently as 1847. . . .

“The Black-tailed Godwit has been known to nest in the Faroes, and does so annually in the south-east of Iceland, where it is known by the name of jadrakan, or ‘earth-raker.’ On the Continent it breeds sparsely as far north as lat. 64°–65° in Scandinavia and Russia, plentifully in Poland, sparingly again in Silesia, and—where the localities are suitable—in Northern Germany, Denmark, Holland and Belgium; but elsewhere it is chiefly known on migration, in the course of which it occurs in the Canaries and Madeira, its winter-quarters commencing in the basin of the Mediterranean and extending to Abyssinia. In Asia it is found in Western Siberia south of lat. 60° as far as the valley of the Ob, and through Turkestan to the Altai, ranging down to Ceylon in winter; while east of the Lena a larger form—distinguished by separatists as L. melanuroides—inhabits Eastern Siberia and Kamschatka in summer, passing through Japan and

China to Australia and Polynesia during the colder months. The reported occurrence of the Black-tailed Godwit in Greenland is open to question, and in North America its representative is *L. hudsonica*, which is smaller and has dark brown instead of white axillaries."

The late Mr. Henry Stevenson published in 1870 the following interesting details respecting the former breeding of this species in Norfolk*:

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The Black-tailed Godwit is another of those grallatorial birds which, within the last half century only, have ceased from breeding in our marshes. It were needless here to repeat the 'twice told tale' of its extinction, the same causes having effected the same end in this as in many other cases, but I have thought it desirable to ascertain as nearly as possible, from contemporary evidence, the date when this fine species ceased to nest in Norfolk.

'Five species in particular,' wrote Mr. Lubbock in 1845, 'used formerly to swarm in our marshes,—the Godwit, the Ruff, the Lapwing, the Redshank, and the Black Tern. . . . Whilst the Redshank, in the breeding season, flew dashing around the head of the intruder on his territories, and endeavoured like the Lapwing to mislead the stranger from the nest, higher in the air, and flying in bolder circles uttering a louder note, was the Black-tailed Godwit, called provincially 'the shrieker' from its piercing cries. This bird is now almost extinct in this part of Norfolk; it used to breed at Buckenham, Thyrne, Horsey, and one or two other places.' Mr. Lubbock evidently wrote guardedly as to their extinction, probably not having the opportunity at that time to ascertain the fact conclusively, but there is no question that prior to the date of his 'Fauna' this species had become, what it is now in this county, an irregular migrant only. As far back as 1825, we have the following statement of Messrs. Sheppard and Whitear: 'Some of these birds used to breed in the marshes of Norfolk, and three years since we received the egg of this species from Yarmouth. But it is doubtful whether they are to be found at present in their former haunts.' This doubt I can now satisfactorily clear up, on the authority of Mr. Rising, of Horsey, who remembers a Godwit's nest in that neighbourhood in the summer of 1829, and thinks it quite possible that these birds may have bred there some few years later, but for the next ten years, being invariably engaged in London during the spring months, he had no means of satisfying himself on this point, although greatly interested in the subject. If we assume, then, that in yearly decreasing numbers they still frequented certain favourite localities for a few seasons longer, their extinction may, I think, be said to have occurred somewhere
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BLACK-TAILED GODWIT.

between the years 1829 and 1835. It seems probable, however, that during the next twenty years a pair or two occasionally returned to their old haunts in the spring, though only to be robbed of their eggs, or shot down from their rarity, as I have heard of such occurrences from two or three different sources. Mr. Gurney remembers, some thirty years ago, being informed that a pair or so of Black-tailed Godwits still resorted at times to Sir William Beauchamp Proctor's marshes, near Buckenham Ferry. This species, also, as Mr. Gurney remarks, was formerly an abundant breeder in Holland, but, like the Purple Heron, Spoonbill, and Little Bittern, has been so destroyed there of late years, that it has become comparatively rare; and this fact would also in some degree account for its scarcity on the East coast of England.

"In the Catalogue of Mr. E. S. Preston's collection of eggs, which was sold at Stevens', 23rd March, 1858, 'Lot 95' consisted of 'three Black-tailed Godwits, Reedham, Norfolk, 1857.' Two of these specimens are now in Mr. A. Newton's collection, who was assured by Mr. Preston that the above description of the eggs was correct, and that they had been taken in Norfolk.

"Mr. A. Newton has also an egg of this bird, given to him by Mr. O. Salvin, who obtained it from a friend of his, Mr. J. King, late of Trinity Hall, Cambridge. This example was bought by Mr. King, in 1847, in the Cambridge market, of a countryman, who had also a young Short-eared Owl alive—and there can be little doubt that both bird and egg had been taken in this country."

Mr. H. E. Dresser writes *:—"Respecting the nidification of this Godwit, we translate the following notes contained in a letter received from our friend Dr. L. Taczanowski, of Warsaw:—'In Poland large numbers breed in two marshy localities on the eastern part of the Vistula, in the Government of Lublin, on the vast marshes between the rivers Wiperz and Bug, and on the marshes by the canal of Augustow. It also breeds in some parts of the Government of Plock, but in fewer numbers, and in other portions of our country is only rarely seen during migration. In the spring, when the snow disappears, they arrive in the marshes and frequent the edges, waiting until the water leaves their nesting-places. Usually they begin breeding early in May, and about the middle of June young may be found fully fledged. They generally breed in large societies, in tolerably damp places covered with high thin herbage where there are tussocks or small dry places, but also in the fields (in scattered pairs or small colonies), and in small marshes covered with grass and bushes. On the top of a tussock or a dry place they make a depression about three inches deep, and line it carefully

and neatly with dry grass, depositing four eggs, which both male and female sit on. If a human being approach their nesting-colony, they meet him when some distance from it, uttering loud cries, and returning again and again in larger numbers as he comes nearer to their nests. When he is amongst the nests all the birds fly overhead uttering a continual lamentation. If the intruder remains there any time, they become tamer, and a few return to their eggs, especially if the latter are hard-set. Before they have eggs they are very shy, rarely approaching within gunshot; but when the young are hatched they are most courageous, and will come within a few feet of the intruder, not even retreating when fired at, and dozens may be killed. They will attack a cow or horse if they approach their breeding-places, and attack and pursue any bird of prey or Crow that may pass near. When the young have attained a good size the parents take them to some other place, generally to the fields or shores of the lakes, where they assemble from all parts, and leave when old enough to do so. This is the best time to shoot them, as both parents and young fly near the sportsman, the latter not calling. All the families, when strong enough on the wing, assemble and leave us very quickly, in small flocks, only stragglers remaining as late as July.”

Mr. Alfred C. Chapman has published the following interesting account of a visit, in 1893, to the breeding grounds of this species in West Jutland *:

“A glance at a map of West Jutland will show that it is broken up into fiords and marine inlets, communicating with the sluggish rivers flowing from the flat interior. In some cases the junctions of these rivers with the sea form soft marshes, rushy lagoons, and areas of shallow brackish water, more or less studded with islets and promontories overgrown with salt-grass, far removed from the ordinary haunts of aquatic fowl. The marshes, as distinct from the islets and salt-grass promontories, are areas of squashy moss, grass, rush, and bog-plants interwoven one with another, difficult, if not dangerous, to explore; but in most cases there are creeks of water which intersect these marshes in various directions and enable a flat-bottomed boat to be pushed about so as to give access to their interiors. Then it becomes necessary, in the search for eggs, to traverse on foot their squashy surfaces, where, at every step, the ground quakes for yards around in most unpleasant fashion and the water oozes out of the moss well over one’s boot-tops. Such are the places most loved by the Black-tailed Godwit (Limosa argocephala), and on approaching, the wailing cry will soon be followed by the appearance of a bird high in air. That bird has left its nest perhaps a thousand

yards ahead, nor will it usually return thereto until it has made itself pretty confident that the danger has disappeared. To find the nest is therefore no easy matter; indeed, after considerable experience, I may say that few birds are so cautious of their nests as Godwits, and even when the nest has, after long search, been luckily discovered, still the old birds never come within range of ordinary gunshot. The general cry of these Waders, when not distressed, may be syllabled as 'Tu-ée-tóoo' often repeated, but they have a variety of cries, their distress-call being a clamorous wail, not unlike that of a Common Buzzard, though, of course, not so loud. The date of laying seems to vary considerably, for on May 10th we found our first nest, containing four very hard-set eggs, which must have been laid about the last week in April. Then, on May 13th, we not only found a nest containing four fresh eggs, but we were also fortunate enough to discover a brood of young ones, perhaps two days old. It should be mentioned, in explanation, that we had thrice tried to find this last nest; but the bird always rose from a different part of the marsh, which led us to believe that she must have young, and it was while making, after a long watch, a final effort to find the eggs, that we accidentally stumbled on the young birds in the long grass. On one occasion, after we had been lying for some time pretty well concealed, we noticed through the binoculars a Godwit walking and running towards us until it eventually disappeared quite suddenly. We thought it might have sat down on its nest, so we marked the place carefully and then stood up; the bird instantly rose about 150 yards from us, and on walking straight to the spot we were delighted to find the nest with four olive-green eggs. In another instance we observed two birds playing together in the air over a certain part of the bog in such a manner that our suspicions were sufficiently aroused to cause us to cross the quaking surface until we actually walked right on to the nest and its four eggs. The nests were mere depressions in the moss, without any special lining-material, and four is the number of eggs laid. The downy young have extraordinarily developed legs and feet in comparison with the size of the body; the beak and legs are lead-colour; the body pale yellow or fawn, with darker brownish-coloured streaks or bars; the irides black. Even when only a day or two old, these youngsters were adepts at walking amongst the roughest grass; they uttered a plaintive little call-note when trying to find each other in the grass. By the aid of an old brown-coloured water-dog we were able to secure specimens of the parent birds, but without this dog they never came within shot. The females are much larger and longer in the bill than the males; their heads, necks, and breasts are a pale red or fawn-colour, bellies white, and backs grey, splashed a little with black and russet-coloured feathers.
Respecting the nidification of this species Mr. H. Seebohm writes *:—"The breeding-season of the Black-tailed Godwit commences in May, and fresh eggs may be obtained throughout that month. Although the bird is so rare in the British Islands, it breeds commonly on the opposite coasts of continental Europe, whence numbers of its eggs are annually sent to London for sale. Its breeding-grounds are in marshy districts; and although the bird can scarcely be called gregarious at this season, numbers of its nests may be found in a comparatively small area. Capt. Elwes and I took the nest of this bird in Jutland, near Tarm. On the 17th of May we devoted our time to the marshes by the river, poling down stream in a flat-bottomed boat as far as the fjord, to which I have already alluded in my article on the Avocet. In many places these marshes are of great extent. On some of the higher ground a rank grass grows, but in most places it is moss, lichen, peat, sand, and sedge, except where we sank a few inches in the water. It was rough-dained in most places, with dykes a yard or more wide, but in general we found a good bottom. The river was dammed-in with turf-banks, though it sometimes divided into several streams, and occasionally opened out into a lake full of Equisetum limosum. In one place the marsh was full of patches of reeds four or five feet high. The total length down to the fjord was perhaps eight miles. . . .

"At last we came upon several pairs of Black-tailed Godwits, whose loud cries betrayed the vicinity of their nest or young. Once or twice we heard their call-note, from which the name Godwit is derived, and which sounds like tyū-it; but the alarm-note—a loud, clear, rich tyū, tyū—was almost incessant as they hovered over our heads, with their feet projecting beyond their broad tails. As we crossed and recrossed the ground in every direction, they watched us with the greatest anxiety, sometimes flying away for a short time, but always reappearing again with renewed cries. In two places we spent at least an hour in a fruitless search for the eggs, and finally we came to the conclusion that they had young, and gave up the attempt. After spending some time in exploring the south shore of the fjord, we crossed to the north shore as a sort of forlorn hope. Here a small colony of Black-headed Gulls revived our drooping spirits, and then, by pure accident, I stumbled upon the nest of a Black-tailed Godwit. It was a mere hollow in the short coarse herbage, on the dry part of the ground, somewhat deep, and lined with a handful of dry grass. The eggs, four in number, were slightly incubated; but we did not see a trace of the parent

* 'History of British Birds,' vol. iii. pp. 164, 165.
birds. A few yards from this nest a Shoveller was sitting on nine eggs, considerably incubated.

"The eggs of the Black-tailed Godwit are four in number when the full complement is deposited, olive-brown or pale olive-green in ground-colour, indistinctly blotched and spotted with darker olive-brown, and with underlying markings of greyish brown and pale inky grey. On some eggs the markings are very pale and ill-defined. They are pear-shaped, and vary in length from 2·2 to 2·05 inch, and in breadth from 1·52 to 1·45 inch. It is impossible to give any reliable points of distinction between the eggs of this Godwit and those of the Bar-tailed Godwit, which require the most careful identification. Only one brood is reared in the year. When the young are hatched the old birds become much tamer, and approach within a few feet of the intruder. It is said that they attack any predaceous bird that may chance to put in an appearance on their breeding-grounds."

Mr. H. E. Dresser states that he was informed by the late Mr. Benzon, who met with this species nesting in Denmark, that the eggs measure from 1·89 by 1·45 inch to 2·2 by 1·49 inch, two varieties measuring 2·04 by 1·37 inch and 1·96 by 1·37 inch respectively. Mr. Dresser further states that Dr. Rey gives the average measurements of 50 eggs of this species in his collection as 2·13 by 1·46 inch, the largest measuring 2·35 by 1·48 inch, and the smallest 2·04 by 1·37 inch.*

Mr. H. Bendelack Hewetson informs me, at the moment of going to press that the Black-tailed Godwit has been discovered nesting on the coast of Lincolnshire as recently as in 1885, by Mr. Bert Hamerton, of St. Alban's Vicarage, Leeds. At my request Mr. Hewetson kindly obtained the following particulars of the discovery, which I quote in Mr. Hamerton's own words:—"I am pleased to describe the circumstances under which I found the Black-tailed Godwit's egg, and will endeavour to do so as accurately as possible. The part of the coast is situated about 8 or 10 miles south of Wainfleet, and is an extensive stretch of grassy marsh, on the sea-side of the sea-bank, dotted all over with innumerable pools of all shapes and up to the size of a tennis-lawn, mostly very shallow. The marsh is crossed by drains from the land, which are guarded by sluices at the sea-bank. These drains run into wide muddy creeks, which the sea fills in spring-tides only. There is a large area of land raised to a slightly higher level than the marsh which surrounds it; this is covered with very tall reedy grass, which tends to grow in tussocks round the edges of the pools and

boggy places scattered over this area. It was under the overhanging grass of one of these tussocks, about two yards from the edge of a pool, that I found the Godwit's nest. I have no distinct recollection of the formation of the nest, or, rather, spot on which the eggs rested, so I will not attempt a description. There were two eggs, but being then of a more sentimental turn of mind than now, and having no idea what I had found, I just took one egg, lest I should hurt the feelings of the old bird. I came upon the eggs by accident, while looking for those of Redshanks, numbers of which birds still breed there. It was in the year 1885, and, I believe, the month of June. I have a dim recollection of standing with the egg in my hand, staring at a strange bird wheeling high in the air, uttering a peculiar cry, with which I was unfamiliar. It may or may not have been the old bird. Horses and sheep now graze on these marshes, which are never in the highest tides entirely submerged. Except that there are now more drains and fewer boggy places, the character of these marshes has not, I think, altered to any very obvious extent."

From the foregoing graphic account it will be seen how admirably this Lincolnshire marsh was suited to the nesting requirements of this species. The egg is still in Mr. Hamerton's possession, and Mr. Hewetson, who has seen it, informs me that it is unquestionably that of a Black-tailed Godwit.
WHIMBREL

Numenius phaopus (Linnaeus)
WHIMBREL.
Scolopacidae.] Numenius philaeopus (Linnaeus).

Explanation of Plate.

Figure 1. Shetland, May 25, 1885. In collection of R. W. Chase, Esq.
" 2. 
" 4. Pomerania, May 25, 1887.
" 5. Archangel, June 2, 1887.

In collection of H. Massey, Esq.

The Whimbrel is a common spring and autumn migrant, a few pairs remaining to breed in the Orkneys, Shetlands, and probably in the Outer Hebrides.

The late Mr. E. T. Booth observed a pair of these birds apparently breeding on an islet off the west coast of Ross-shire. He writes*:—"But two or three pairs of Whimbrel which might reasonably be judged to be engaged in nesting-operations were fallen in with during the two seasons (1868 and 1869) in which I devoted particular attention to examining the reputed haunts of these birds. While off the west coast of Ross-shire early in June 1868, in a small fishing-craft during a fresh breeze of wind, a pair of Whimbrels flew up from one of the rocky islets lying outside Loch Ewe, and continued for some time hovering over the boat, calling loudly and evidently greatly distressed by their lonely abode being threatened with a visit. These noisy birds were shortly joined by two or three others which came from some of the adjacent islands. Though several attempts were made, the surf was breaking so heavily round the rocks that there was not the slightest chance of effecting a landing. There did not appear above a quarter or at most half an acre of coarse heather and grass on the summit of this wild and rugged mass of red rock, that rose but twenty or thirty feet at the highest point above the waves, which were constantly breaking around with terrible force. On the following day the attempt to search the spot was renewed, though

* 'Rough Notes on Birds observed in the British Islands,' vol. ii.
unfortunately without success. The same birds were again seen; and from their actions I was convinced there could be little doubt they were nesting. A continuation of stormy weather, which set in with still greater fury, put an end to all hopes of exploring this terribly exposed coast before I left the district."

Colonel Feilden writes as follows respecting the nesting of this species in the Færøe Islands, where he spent six weeks in May and June 1872 *:—"Svabo mentions that they arrive about the middle of April and depart by the 29th of September. Herr Müller has seen some as late as the 3rd of October. On the 16th of May I noticed them, though paired, in flocks near to Thorshavn, feeding on the meadows; soon afterwards they separated and betook themselves to the breeding-grounds. They are so abundant as a breeding species that we never seemed to be able to get out of their sight; they were constantly flying round us in company with the oyster-catchers. The first nest of the whimbrel that we procured was on the 25th of May, in the Island of Sudoree; afterwards we found and received them in considerable numbers. On the 17th of June I got twelve nests, each with four eggs, which had been collected for me the week previously from the vicinity of Nordedhal, Stromoe; all were quite fresh. On the 16th of June I found a nest with four eggs in rather a singular position: it was placed close to a rill, between two blocks of stone, which just gave room enough for the bird to squeeze between. The whimbrel is of a pugnacious disposition whilst breeding, and is constantly on the alert to drive off intruders from the vicinity of its nest; I have watched them by the hour chasing the lesser blackbacked gull (L. fuscus). When engaged in these combats their flight is rapid and arrow-like, whilst they constantly repeat their trilling cry, which has not inapty been described as resembling the words ‘tety, tety, tety tet,’ quickly repeated. A beautiful white variety is in Herr Müller’s collection."

Messrs. H. H. Slater and T. Carter give the following information respecting the breeding of the Whimbrel in Iceland, which they visited in 1885 †:—"Of Whimbrels’ nests we found plenty. One is noteworthy; it contained only three eggs, much incubated; close beside the nest, which was on a tussock in a marsh, lay, in a small artificial heap, about a tablespoonful of small rounded pebbles, the size of peas, all of which must have been brought from the river, nearly a mile off. Perhaps they were a supply of accessory molars for the young birds when hatched.

"Whimbrel rise wild from the nest; or, more probably, slip off the nest

† "Field Notes from Northern Iceland," 'Zoologist,' 1886, p. 154.
unnoticed as soon as you are anywhere near them, and run some distance before taking wing. The very broken nature of the ground, combined with the large number of other Whimbrels about, prevented our seeing them leave the nest, except on two occasions, on both of which we came upon them suddenly round a corner; from one nest C. saw the bird steal a few yards off, and S. walked on to a sitting bird, who flew off."

Referring to this species, Mr. H. E. Dresser writes *:—“In Norway, as we are informed by our friend Mr. Robert Collett, ‘it is chiefly found during the breeding-season north of the Trondhjem fiord, where it is numerous in the coast-region of Nordland and Finmark, in the latter localities commoner than Numenius arquatus. In Southern Norway, where this latter species is so numerous, the Whimbrel is rare during the summer, and found only here and there, though breeding in the fells at an altitude of from 3000 to 4000 feet above the level of the sea, as on the Jotunfjeld and in Thelemarken; but it is only found there in scattered pairs. The nest is simply a depression in the soil on the top of some slight elevation in any comparatively dry spot in the marshes, and is usually lined with a few grass-bents or leaves of Rubus chamaemorus. The old birds are very shy, and can rarely be approached within gunshot, though fond of their young.’ On the Tromsø island Mr. Collett found incubated eggs on the 17th of June.”

Mr. Dresser further states that he possesses a series of Whimbrels’ eggs, all obtained on the Færoe Islands, the measurements of which vary from 2·57 by 1·62 inch to 2·25 by 1·57 inch; also that 27 eggs of this species measured by Dr. E. Rey averaged 2·29 by 1·6 inch, the largest measuring 2·44 by 1·69 inch, and the smallest 2·14 by 1·55 inch. Mr. Dresser further says that a series obtained by the late Mr. Benzon from the Færoes and Iceland measured from 2·56 by 1·69 inch to 2·12 by 1·61 inch.

Mr. H. Seebohm states that the eggs of this species “vary in length from 2·5 to 2·2 inch, and in breadth from 1·75 to 1·6 inch.”†

† ‘History of British Birds,’ vol. iii. p. 102.
A few Opinions expressed by Subscribers on Part I.

"Mr. Poynting's egg-pictures are by far the best since Hewitson."—Lord Lilford (President of the British Ornithologists' Union).

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EGGS OF BRITISH BIRDS.

LIMICOLÆ.
(PLOVERS, SNIPES, SANDPIPERS, &c.).

BY
FRANK POYNTING.

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RINGED PLOVER.

ÆGIALITIS HIATICULA (Linnæus).

EXPLANATION OF PLATE.

Figure 1. Inner Fern Island, May 16, 1886. In collection of R. W. Chase, Esq.

,, 2. Links of Keiss, N.B., May 20, 1887.
,, 3. Tain, N.B., June 4, 1892.
,, 4. Chesil Beach, Weymouth, June 27, 1892.
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,, 6. Chesil Beach, Weymouth, May 23, 1892.
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,, 10. Denmark, May 2, 1886.
,, 11. Lapland, June 22, 1889.

In collection of H. Massey, Esq.

Figures 10, 11, and 12 represent eggs of the smaller race.

The Ringed Plover is a common resident in the British Islands, breeding on the coasts and sometimes on the shores of inland lakes, and occasionally on sandy warrens at some distance from the sea.

Mr. Howard Saunders writes *:—"Throughout the British Islands the Ringed Plover is generally distributed along the flat portions of the coast, as well as on sandy warrens and inland lakes at some distance from the sea, while on migration it is also found by the banks of rivers. The birds which are more or less resident here, and on the opposite shores of France and Holland, as well as those which arrive from the north in autumn, are larger, more bullet-headed, and duller in the colour of the mantle than those which come from the south in spring, and leave us after a short stay—of which, perhaps, a few remain to breed in Kent and Sussex."

Mr. Seebohm divides this species into two races, viz. the Greater Ringed Plover, breeding in the British Islands and Western Europe, and the Ringed Plover, breeding in the British Islands and Western Europe, and the Ringed

* 'Manual of British Birds,' p. 523.
Plover, a smaller race, which is migratory and widely distributed. He remarks *:—"So far as I have been able to ascertain, the Ringed Plovers breeding in the British Islands and Western Europe lay larger eggs than those breeding elsewhere."

The late Dr. Saxby has given the following interesting account of the breeding habits of this species in Shetland †:—"The spring note is sometimes heard as early as the end of January, but the birds do not return to the breeding-grounds before March, when pairing immediately commences. The nest is most often found upon the beach, a little above high-water mark, among sand or gravel; but most of the shores being rocky and precipitous, the sides or even the very tops of the hills are frequently resorted to. So common are the nests in these situations that I have found three, quite accidentally, in the course of a hurried walk of less than two miles over the hills between Balta Sound and Haroldswick, and I have even known of nests in the ploughed fields. The favourite breeding-ground in the neighbourhood of Balta Sound is situated about half a mile inland, at the foot of a range of steep hills, and with a large extent of cultivated land lying between it and the sea. Nests upon the hills are invariably found in the bare gravelly patches which so frequently occur among the stunted grass and heather, a preference being shown to the vicinity of water, even though the quantity be barely sufficient to glisten in the sunshine. A perfect nest consists of a saucer-shaped hollow scraped in the ground, lined with small stones, which are sometimes so thickly piled round the sides that the eggs are found standing almost perpendicularly upon their small ends; upon the beach, broken shells are often substituted for or mixed with the stones. Like the Oyster-catcher, the Ringed Plover will frequently make more nests than it requires for use, and three or four may sometimes be found within a few yards of a sitting bird. Occasionally, the presence of a large stone or a root at the bottom of one of these hollows shows sufficient cause for abandonment, but it often happens that these barren nests are carefully lined and finished. The cavity of a perfect nest measures from four inches and a half to five inches across, according to its depth, the deepest being of course also the widest. A few years ago, near the spot above mentioned, about half a dozen pairs occupied a piece of ground of about four hundred yards in length by as many in breadth. One winter, a number of men commenced digging out and removing the numerous scattered stones, leaving the ground much cut up and full of small holes. Upon the return of the breeding-

* 'History of British Birds,' vol. iii. p. 20.
† 'Birds of Shetland,' pp. 164-166.
season, the little colony, instead of being scared completely away, merely shifted about three hundred yards southwards, a position which it still continues to occupy. In the spring of 1859 I found a solitary nest near Swina Ness, and watched it until the four young birds were hatched, when the nest was deserted for the remainder of the year. The same thing happened the next spring, and even the next to that, after which I never saw the birds near the spot again; thus I became acquainted with two important facts in the history of this species,—first, that it will return annually to the same nest; and secondly, that it is single-brooded, although fresh eggs are to be found from the middle of April to the beginning of July. The sitting bird usually runs from the nest instead of taking wing, but no one seems to have clearly made out whether or not it alights at a distance from the nest upon its return, as the Skylark does. I remember, however, accidentally disturbing a Ringed Plover from its nest one snowy morning early in May. The bird, as usual, ran directly away, the footprints thus made being the only ones upon the otherwise undisturbed surface of the snow in the immediate vicinity of the nest, although there were numerous others in all directions a few yards distant. After remaining in a neighbouring cottage for about ten minutes, during which time no other shower had occurred, I returned to the nest, and there found the bird upon the eggs, the return track being visible to the very brink. Notwithstanding the unfavourable state of the weather, the whole four young ones came forth in due time. At a very early stage of incubation, the bird usually runs rapidly away; but as the time of hatching approaches, the usual device of feigning lameness or a broken wing is invariably resorted to, and so helpless does the bird appear that it is difficult to avoid an occasional attempt to throw one's hat over it. No one who witnesses the singular performance for the first time fails to fall into ecstacies of pity and admiration at the perfect manner in which the clever little bird acts its part."

Mr. Frank Brownsword writes* :—"The following remarkable instance of persistent brooding of a Ringed Plover, Aegialitis hiaticula, came under my observation during the past breeding-season, at St. Anne's-on-the-Sea, Lancashire:—On May 26th, whilst strolling along the beach on the look-out for nests, I observed a Ringed Plover running off in a suspicious manner about twenty yards away on the shingle, and on coming to the spot, I found a nest containing four corks,—ordinary beer-bottle corks, which lie about the beach in hundreds. Thinking this the trick of some school-boy I threw the corks away, and gave the matter no further thought. However, three or four days after, passing the same

* · Zoologist,' 1892, pp. 31, 32.
spot, I surprised the bird again, sitting on three corks. I forget whether I threw these away or not. On June 7th I again put the bird off the nest, which this time contained four corks. These I threw away. On July 10th, six weeks later, I visited the place again, and, to my surprise, put a bird off from a nest about two yards from the site of the old one. This contained four corks, one of which I threw away. The first nest was full of sand, and only recognizable by the few fragments of shell which had originally lined it. On July 26th I surprised the bird again upon the nest, finding on this occasion four corks and half a cork. I threw them all away but the half cork, and lay down to watch. In a short time the bird came back and sat on the nest. Some people passing disturbed it and it ran off, soon, however, to come back. This happened several times, until a lady with some children sat down on a sandhill in full view of the nest, when the bird ran off and then flew away. I marked two corks and dropped them near the nest before leaving. The following day, towards evening, I again visited the nest, put the bird off, and found the two marked corks in the nest and the half cork six inches away. These I threw away, and again lay down to watch. The bird soon came back, and settled down in the empty nest for a short time. Soon, however, it got up again, and after this seemed uneasy, as it would stay in the nest for a minute or two, then run away a short distance, only to return. This was repeated several times. As it got too cold to watch I went away, leaving two or three corks near the nest. There was a heavy storm of wind and rain on the night of the 28th, and on visiting the spot once more, on the 29th, I found nothing but a few fragments of shell to mark the spot. I left St. Anne's on the 31st, and did not return for two months. During my various visits to the spot, which were made at all hours of the day, I never once observed anyone at the nest, and cannot help thinking that the bird itself put the corks in the nest—at any rate after they had been thrown away once.

Referring to this species, Mr. H. Seebohm writes*:—"The eggs are laid from the middle of April to the end of May; but they have been found as early as the last week in March and as late as the beginning of August . . . . . The eggs are four in number, and do not vary much in colour. They are very pale buff or stone-colour, spotted with blackish brown and with underlying markings of inky grey. The spots are pretty evenly distributed over the surface, but on many specimens are most numerous on the large end, and vary in size from specks to that of a very small pea, the average being about that of No. 10 shot. The eggs are pyriform in shape, and vary in length from 1.55 to 1.3 inch, and in

* 'History of British Birds,' vol. iii. p. 23.
breadth from 1·05 to '98 inch, the larger dimensions being those of British examples. . . . . If the first eggs are removed others will be laid, sometimes in the same nest; but there appears to be no satisfactory evidence that the bird rears more than one brood in the year."

Mr. H. E. Dresser states that the measurements of eggs of this species in his collection vary from 1·35 by 1·0 inch to 1·25 by '95 inch. *

LITTLE RINGED PLOVER.
Aegialitis curonica (J. F. Gmelin).
LITTLE RINGED PLOVER.
ÆGIALITIS CURONICA (J. F. Gmelin).

EXPLANATION OF PLATE.

Figure 1. Denmark. In collection of F. Poynting.

" 2. Austria, May 10, 1888.
" 3. Hungary, June 3, 1889.
" 4. Austria, May 10, 1888.
" 5. Brandenburg, Prussia, June 11, 1888. \{ In collection of H. Massey, Esq.\}

The Little Ringed Plover is a very rare accidental visitor to England.

Writing of this species, Mr. Howard Saunders says*:—"It is somewhat remarkable that the Little Ringed Plover should so seldom visit us, inasmuch as the bird has been recorded from the Faroes, and is said by Mr. B. Gröndal to be a wanderer to Iceland, while, according to Bogdanow, it occurs sparingly as far north as 64–66° N. lat. in Russia and Asiatic Siberia. It owes its specific name to its occurrence in Courland, and it breeds abundantly in Poland and Germany, less plentifully in Scandinavia and Denmark, and seldom in Holland and Belgium, where localities suited to its tastes are wanting. It does not affect the open seacoast, preferring expanses of sandy soil by inland lakes or large rivers, and these it finds in some parts of France, the Spanish Peninsula, Italy, the south of Europe generally, and Northern Africa. In Asia, besides Siberia as already mentioned, it nests in Turkestan up to an altitude of 4000 feet, China, and Japan; it visits India as far as Ceylon during the cold season, and ranges southward to the Moluccas and New Guinea. In Africa it has been recorded from as far down as Mozambique on the east and the Gaboon on the west."

Mr. H. Seebohm writes†:—"The Little Ringed Plover is perhaps most active in the pairing-season. When Dixon was in Algeria in the spring of 1882 he noticed that the male often soared into the air like a Lark, and flew about for some considerable time, uttering his peculiar love-song, soaring higher and higher

† 'History of British Birds,' vol. iii. p. 18.
above the sandy wastes, then gradually descending again . . . . It arrives at its northern breeding-grounds in April, in very early seasons late in March, leaving for the south in August and September. Its eggs are seldom laid before May, often not until June. It makes very slight provision for them, merely scratching a little hollow in the sand or shingle, which it treads into a very neat, round, shallow basin, in which the eggs are laid without any lining. They are four in number, pyriform in shape, pale buff in ground-colour, speckled and streaked with surface-spots of dark and light brown, and with underlying markings of inky grey. The spots are pretty evenly distributed over the surface, but are usually most numerous on the large end. The eggs vary in length from 1·2 to 1·15 inch, and in breadth from 0·9 to 0·85 inch. In the streaky nature of their markings the eggs of this bird show an affinity with those of the Kentish Plover, but their lighter colour, more delicate markings, and smaller size readily distinguish them. The eggs are extremely difficult to find, owing to their resembling in colour the surrounding objects. The bird does not sit very close—in fact, during the day, if the weather be warm and fine, it does not sit on its eggs much, the sun supplying them with sufficient warmth. When the young are hatched the old birds often become very anxious for their safety, and will try to allure an intruder away, or hover above his head, uttering their note incessantly until he takes his departure."

Mr. H. E. Dresser states that the measurements of eggs of this species in his collection vary from 1·22 by 0·85 inch to 1·15 by 0·85 inch.*

KENTISH PLOVER.

Aegialitis cantiana (Latham).
KENTISH PLOVER.

ÆGIALITIS CANTIANA (Latham).

EXPLANATION OF PLATE.

Figure 1. Holstein, June 4, 1888.
" 3. Hooge, Holland, June 5, 1888.
" 5. Holstein, June 5, 1888.

In collection of H. Massey, Esq.

This species is a rare summer visitor, breeding in limited numbers on the shores of Kent and Sussex.

Mr. H. A. Domblyn gives the following interesting account of the habits of this species *:—"About the middle of April the Kentish Plover arrives in this country; and, as its principal breeding-places are along the south-east and south coasts of Kent, it at once repairs to these spots. Nidification, or rather propagation, begins soon after, depending a good deal on the season. The weather in May, 1878, having been warm, the young were hatched by the end of that month; last season being as much against them as the previous one was in their favour, I found eggs only half incubated by the beginning of June. The eggs, which are three in number,—not four, as is usual with other species of the genus,—are generally laid on the bare beach. Occasionally the bird will deposit them on a heap of seaweed which has been thrown up by a very high tide. The most usual place is on small pebbles through which a little grass grows. Where the eggs are so deposited, it lays its first egg on the stones without any attempt at a nest, but twists a few pieces of the surrounding grass amongst the pebbles, so that by the time the three are deposited there is a scanty apology for a nest. If put off the eggs, the bird will retire to a short distance and utter a plaintive whistle, run a few yards, then fly a little, and drop and run again. As soon, however, as the young are hatched its manner is quite different; it will then fly very close round,

* 'Zoologist,' 1880, pp. 138, 139.
giving at each stroke of the wings a sharp whistle, then drop suddenly, as if shot, crouch very close, expand its wings and tail, and drag itself along, then suddenly take wing again, and go through the same motions till the intruder is at a safe distance. The call-note is a soft whistle quickly repeated four or five times. The young, which run as soon as they are hatched, keep close to the parent birds till well able to shift for themselves. The food of this species consists of insects and small worms, which it picks up at the water's edge and on the beach, when its form and manner much resemble the Sanderling, the head being drawn in, the body nearly horizontal, and the thighs concealed among the feathers of the under plumage. There is a species of spider which has hitherto baffled my attempts at capture on account of the rapidity with which it travels among the stones, and which is found in great abundance on the beach, and as the bird is often seen running very nimbly over the stones and occasionally darting its head down it may fairly be presumed that this insect constitutes a good deal of its food. If the eggs are approached, but not too nearly, the bird may be seen to run among the grasses, and every now and then raise itself on its legs and stretch its neck to see and not be seen. It possesses great powers of ventriloquism. I have stood still and tried for some minutes to discover one which was in an entirely different place to what I had supposed from its note. Their favourite place for exercising this is on a moderate-sized stone, where they will stand and whistle for many minutes at a time."

Mr. H. E. Dresser writes*:—"The best notes on the nidification of this bird that are known to me are those by Baron von Droste Hülshoff, who found it breeding numerously on the island of Borkum, and from whose work (Vogelw. Bork. pp. 154–157) I extract the following information. The Kentish Plover is very common on Borkum during the breeding-season, and is scattered throughout the dunes. The nest is placed both in the thickly overgrown dunes and in the large bare sandy tracts, as well as in the inner portions of the dunes, where rushes, grass, brambles, and *Ononis reptans* grow thickly; and he never met with it on the outer sands, as stated by Naumann, nor did he find the nest in an open situation, but often in the middle of a bunch of wild oats or amidst willow-shoots, though never so carefully hidden as that of the Redshank. The nest itself he describes as being a slight depression in the ground, lined with a few grass bents or fine rootlets. 'Often,' he writes, 'several pairs breed within a very small area; I have found nests not ten paces distant from each other. The various pairs lived in amity together, and joined in uttering their cries when I approached. When any one approaches a nest, the male usually warns his mate by uttering a low

flute-like note, $\textit{fluit}$; and I sometimes caught sight of the female running, crouched down, from her nest; and only when she had traversed some distance, and got behind some cover, would she rise into the air and fly circling round, uttering a sharp but not loud $\textit{pit}, \textit{pit}$. Now and again the male would take his turn in circling round; and when either settled down it always alighted where some unevenness in the ground hid it from view, but would immediately run out to look at the intruder, uttering now and again its note, $\textit{fluit}$. Should any one approach too close to the nest, the bird will crawl about at a few paces distance on the ground, uttering a mournful note, $\textit{trärr}, \textit{trärr}$, puffing out its feathers, turning its head and dragging one wing, and if pursued will run quickly away, but will recommence its former manoeuvres should one again remain standing still. During the breeding-season the old birds seldom range far away from the nest, and one may observe the male performing curious aerial motions, which probably represent a sort of love-dance, like the drumming of the Snipe. It flies in a peculiar, Bat-like, wavering manner, the wings being very fully extended, the body thrown now on the one and now on the other side; and it almost describes a circle in its flight, uttering as it flies a peculiar note, which resembles the syllables $\textit{trit}, \textit{tritritritirrr}$. The young leave the nest during the first few days after they are hatched, but do not stray far until they are about half-grown, when they betake themselves to the shore—and when able to fly, collect in flocks and wander about.’”

Describing the eggs of this species, Mr. Howard Saunders writes * :—“They seldom exceed three in number—though I have found four in Spain and also in the Channel Islands—and are rough in texture, and of a yellowish stone-colour, spotted and characteristically scrawled with black.”

Mr. H. E. Dresser, describing eggs of the Kentish Plover in his collection, obtained from Kent, Sussex, and the Holstein coast, says that they “have the ground-colour lighter or darker clay-ochreous, and are marked with greyish black underlying shell-markings and clearly defined black surface-spots and scratches. They differ from the eggs of $\textit{A. hiaticula}$ in having most of the markings irregular and scratchy, almost as if drawn with a pen, whereas in $\textit{A. hiaticula}$ they are generally clearly defined roundish spots and blotches.” He further states that the measurements of these eggs vary from 1·32 by .92 inch to 1·2 by .82 inch.†

Mr. H. Seebohm says the eggs “vary in length from 1·35 to 1·15 inch, and in breadth from .95 to .85 inch.”‡

‡ ‘History of British Birds,’ vol. iii. p. 27.
KILLDEER PLOVER.

Ægialitis vocifera (Lamarck)
KILLDEER PLOVER.

AEGLIALITIS VOCIFERA (LINN.ÆUS).

Explanation of Plate.

Figure 1. Ontario, May 24, 1883.

2. South Dakota, May 24, 1891.

3. Ontario, May 24, 1883.

4. Mexico, June 24, 1890.

5. Missouri, May 7, 1891.


In collection of H. Massey, Esq.

There are only one or two British records of the occurrence of this American species.

Describing the distribution of this Plover, Dr. E. Coues writes*:—“Abundant throughout the Missouri region, as elsewhere in suitable localities in North America. The Killdeer is conspicuous among the few waders that breed at large through the United States, the great majority of these birds passing further northward for this purpose. Being, also, one of the most numerous and widely diffused, few birds are more familiarly known. It must not be inferred, however, from its general dispersion at various seasons that it is non-migratory. On the contrary, it performs extensive journeys, reaching even to South America. I think it migrates chiefly by night. As I sit at midnight penning these pages, in the town of Columbia, South Carolina, in February, I continually hear their well-known piercing notes as they pass rapidly on through the darkness.”

Referring to this species, Wilson writes†:—“As spring advances it resorts to the newly ploughed fields, or level plains bare of grass, interspersed with shallow pools; or, in the vicinity of the sea, dry bare sandy fields. In some such situation it generally chooses to breed, about the beginning of May. The nest is usually slight, a mere hollow, with such materials drawn in around it as happen to be near, such as bits of sticks, straw, pebbles or earth. In one instance I found the

* 'Birds of the North-West,' p. 452.
† 'American Ornithology,' vol. vii. (1813), pp. 73, 74.
nest of this bird paved with fragments of clam and oyster-shells, and very neatly surrounded with a mound or border of the same, placed in a very close and curious manner. In some cases there is no vestige whatever of a nest. The eggs are usually four, of a bright rich cream or yellowish clay-color, thickly marked with blotches of black. They are large for the size of the bird, measuring more than an inch and a half in length, and a full inch in width, tapering to a narrow point at the great end. Nothing can exceed the alarm and anxiety of these birds during the breeding season. Their cries of Kildeer, kildeer, as they winnow the air overhead, dive and course around you, or run along the ground counterfeiting lameness, are shrill and incessant. The moment they see a person approach, they fly or run to attack him with their harassing clamour, continuing it over so wide an extent of ground, that they puzzle the pursuer as to the particular spot where the nest or young are concealed; very much resembling in this respect the Lapwing of Europe."

The late Dr. Brewer gives the following account of the breeding habits of this species *:—"It is said to breed in Louisiana in the beginning of April, in the Middle States in May, and on the Saskatchewan in June. Its nest is of very simple construction, and is usually a mere hollow in the ground, without any lining, or with merely a few bits of dry grasses. Occasionally it is said to construct a nest of grass in a bunch of plants, but this is very rarely done. . . . . During incubation the parents alternate in sitting upon their eggs, and do not leave them day or night, differing in a marked manner, in this respect, from the melodus and the wilsoni. The young run about the instant they leave the shell. If the nest is approached during incubation, or when the young are in danger, both parents resort to various manoeuvres to entice away the intruder: the female droops her wings, utters plaintive notes, and simulates lameness; the male is more demonstrative, and dashes about his head with angry vociferations.

"The eggs are usually four in number, never more—so far as known to us—and very rarely less. They are pyriform in shape, being much rounded at one end and pointed at the other. Their ground, when the egg is fresh, is a rich cream-color, fading into a dull white, over which are profusely spread blotches of varying shape and size, of dark purplish brown, approaching black. These increase in size towards the larger end, and cover a greater proportion of it, but are finer and more scattered elsewhere. They measure 1·65 inches in length by 1·13 inches in their greater breadth."

* 'Water Birds of North America,' vol. i. p. 151.
GREY PHALAROPE.

Phalaropus fulicarius (Lamarck).
GREY PHALAROPE.

SCOLOPACIDÆ.]

PHALAROPUS FULICARIUS (LINNAEUS).

EXPLANATION OF PLATE.

Figure 1. Egedesminde, N. Greenland, 1865; from A. Benzon. In collection of H. E. Dresser, Esq.

2. Upernavik, Greenland, 1868; Dr. Rudolph coll. Ditto.


5. Gamlabran, Iceland, June 28, 1890.


This species is an accidental visitor to the British Islands, chiefly in autumn and winter.

Mr. H. Saunders writes*: "The breeding-range of the Grey Phalarope appears to be circumpolar. Its eggs were found by Dr. von Middendorff in Arctic Siberia, and have also been obtained in Spitzbergen and Iceland, but the majority of those sent to collectors of late years are from the districts of Upernavik and Egedesminde in Greenland. Our Arctic explorers have noticed the bird as far north as 82° 30', and it is abundant in summer on the shores of Alaska, as well as on the Asiatic side of Bering Sea and on all the islands to the northward. In winter its migrations have been known to extend to New Zealand and Chili; in the Indian region it has occurred as far south as Bombay, though its regular lines of passage across Asia have yet to be learned; in Europe, though missing the Volga valley, it is found on many inland waters and on all the coasts down to the Mediterranean; while it also visits North Africa."

Referring to the Grey Phalarope, the late Dr. T. M. Brewer writes†: "This species was found breeding on the Arctic coast of North America by Mr. Mac-

Farlane. It was met with in Franklin Bay on the 4th and 5th of July, and five individuals and two nests were obtained. The nests are said to have been precisely similar to those of *L. lobatus*—mere depressions in the ground, with hardly any lining except a few dry leaves. One nest—found on the 4th—contained three eggs, which were perfectly fresh. The other—taken on the 5th—contained four eggs, in which were but slightly developed embryos.”

Dr. E. Coues, in describing the eggs above referred to, says *:—“The eggs are so similar [to those of *P. hyperboreus*] that they cannot be distinguished with certainty in any given instance . . . . . Their average capacity is greater than those of *L. hyperboreus*. The longest specimen measures 1·30 by 0·90; the shortest, 1·15 by 0·90; another, 1·25 by 0·85.”

Referring to this species, Mr. E. W. Nelson writes †:—“This handsome Phalarope arrives at the Yukon mouth and adjacent parts of the Bering Sea coast during the last few days of May or first of June, according to the season. It is a common summer resident at Point Barrow, where it arrives early in June and remains till the sea closes late in October; it is an abundant summer visitant on the Near Islands, and breeds abundantly on some of the Commander group. It is much more gregarious than its relative, and for a week or two after its first arrival fifty or more flock together. These flocks were very numerous the 1st of June, 1879, at the Yukon mouth, where I had an excellent opportunity to observe them. In the morning the birds which were paired could be found scattered here and there, by twos, over the slightly-floody grassy flats. At times these pairs would rise and fly a short distance, the female, easily known by her bright colors and larger size, in advance, and uttering now and then a low and musical ‘clink, clink,’ sounding very much like the noise made by lightly tapping together two small bars of steel. When disturbed these notes were repeated oftener and became harder and louder.

“A little later in the day, as their hunger became satisfied, they began to unite into parties until fifteen or twenty birds would rise and pursue an erratic course over the flat. As they passed swiftly along stray individuals and pairs might be seen to spring up and join the flock. Other flocks would rise and the smaller coalesce with the larger until from two hundred to three or even four hundred birds were gathered in a single flock. As the size of the flock increased, its movements became more and more irregular. At one moment they would glide straight along the ground, then change to a wayward flight, back and forth,

* ‘Birds of the North-West,’ p. 472.
† ‘Report upon Natural History Collections made in Alaska between the years 1877 and 1881,’ pp. 97, 98.
twisting about with such rapidity that it was difficult to follow them with the eye. Suddenly their course would change, and the compact flock, as if animated by a single impulse, would rise high overhead, and, after a series of graceful and swift evolutions, come sweeping down with a loud, rushing sound to resume their playful course near the ground. During all their motions the entire flock moves in such unison that the alternate flashing of the underside of their wings and the dark color of the back, like the play of light and shade, makes a beautiful spectacle. When wearied of their sport the flock disbands and the birds again resume their feeding.

"When the Red Phalarope arrives in spring its preference is for the flat wet lands bordering the coast and rivers, where it remains to breed. They are not usually found on the sea at this season, but on June 10, 1878, a number were found swimming among the floating ice in the bay of Saint Michaels. Very early in June the females have each paid their court and won a shy and gentle male to share their coming cares. The eggs are laid in a slight depression, generally on the damp flats, where the birds are found. There is rarely any lining to the nest. Toward the end of June most of the young are hatched, and, by the middle of July, are on the wing. The sites chosen for this bird's nest are very similar to those taken by P. lobatus, except that the latter may pick drier situations. One Red Phalarope's nest was found June 8, within six feet of a small brackish pool, the eggs being deposited upon a nest of dried leaves under a dwarf willow. Soon after the young take wing these birds gather in flocks and frequent the sea. They breed all along the Arctic shores of Alaska and Siberia, wherever suitable flats occur, and even reach those isolated islands, for ever encircled by ice, which lie beyond. . . . .

"There is, perhaps, even greater variation in the eggs of this bird than in those of the following species [Phalaropus hyperboreus]. The measurements run from 1.15 by .85 to 1.28 by .89. The ground-color runs through the same tints as appear in the eggs of P. lobatus. The markings average much darker and larger in fulicarius and about the large end it is common for the spots to be so large and numerous as to become confluent and hide much of the shell. The color of the spots is from pale chocolate to deep, bright amber brown.

"The main distinction between these eggs and those of P. lobatus consists in the generally much coarser and more deeply colored markings on eggs of fulicarius."

Mr. John Murdoch gives the following interesting details respecting the Grey Phalarope, which he observed at Point Barrow, Alaska *:—"One of

the commonest birds, remaining till late in October, when the sea begins to close. They arrive early in June in considerable numbers, and already paired, in full breeding-plumage. As with Phalaropes generally, the female is the larger and brighter bird of the pair. We found it hard to make the natives believe that she was not the male. Dissection, actually showing the eggs in the ovary, was necessary before they would admit the fact.

"The whole duty of raising and taking care of the brood after the eggs are laid falls upon the males, who hatch the eggs and take care of the young brood, while the female spends her time away feeding. We never found a female sitting on eggs or took one with her breast plucked. It was invariably the male bird that was started off the eggs.

"When these birds first arrive the sea is still closed, and the birds make themselves at home especially round the small ponds. As the snow melts away, they spread out over a greater extent of country, but never go far from the sea, and are always to be found in the wetter grassy portions of the tundra, particularly back of the beach lagoons, where they nest in large numbers.

"The nest is always in the grass, never in the black or mossy portions of the tundra, and usually in a pretty wet situation, though a nest was occasionally found high and dry, in a place where the nest of the Pectoral Sandpiper would be looked for. A favorite nesting site was a narrow grassy isthmus between two of the shallow ponds. A nest is a very slight affair of dried grass and always well concealed.

"Some of the pairs have their full complement of eggs laid by the middle of June, but others are much later, as fresh eggs were obtained as late as June 29 in 1882. Four is the usual number of eggs in a complete set, although sets of three incubated eggs are to be found.

"They are exceedingly tame and attractive little birds during the breeding-season, paddling about the little ponds on the tundra in their peculiarly graceful manner, having apparently no fear of man or beast, and keeping up a continual twittering, as if of conversation among themselves. They are at all times a noisy bird, especially when gathered into flocks."

Mr. Seebohm states that the eggs of this species "vary in length from 1·28 to 1·2 inch, and in breadth from .9 to .85 inch." *

Mr. H. E. Dresser states that he possesses twenty eggs of this Phalarope, taken at Egedesminde and Upernavik, Greenland, the measurements of which vary from 1·27 by .87 inch to 1·07 by .82 inch. †

* 'History of British Birds,' vol. iii. p. 87.
† 'History of the Birds of Europe,' vol. vii. p. 610.
RED-NECKED PHALAROPE.
Phalaropus hyperboreus (Linnaeus).
RED-NECKED PHALAROPE.

SCOLOPACIDÆ]

PHALAROPUS HYPERBOREUS (LINNÆUS).

EXPLANATION OF PLATE.

Figure 1. Lapland, June 22, 1889.

,, 2. Greenland, June 16, 1886.

,, 3. Iceland, May 21, 1886.

,, 4. Torneå Lappmark, June 14, 1886.


In collection of H. Massey, Esq.

This species is best known as an irregular spring and autumn migrant to the British Islands, although it still breeds in the Shetlands, Orkneys, and Outer Hebrides.

The late Dr. Saxby has published an interesting account of his first discovery of the eggs of the Red-necked Phalarope in Unst, Shetland. He writes *:— “June 24th, 1867.—About eleven o'clock this morning I started for ——, determined to make a thorough search for Phalaropes' eggs. The marshes lie close to ——, among some low meadows about a quarter of a mile from the sea; and on arriving at a rushy swamp about a hundred yards in length, which is the only place where the birds are seen, except in the deep burn which runs from it, I at once began wading. Soon I discovered several pairs of Phalaropes scattered among the rushes at one end of the swamp; and as they kept very close to the little squishy islands which rose up here and there, I examined those spots very carefully, but nothing in the shape of a nest was to be found, either there or at the edge of the water, where the grass was long and of tempting appearance. Having spent about two hours in this way without the smallest success, I very reluctantly turned my steps homeward, and, after proceeding about a mile, sat down to eat my lunch, and to write in my pocket-book a few particulars as to the appearance and habits of the birds. I then took time to think over the matter quietly. The

fact of my having found a nearly perfect egg in one of the birds shot at the same place only a few days previously, proved quite plainly that my want of success was not owing to the young being already hatched; besides, even if they were abroad weeks ago, where were the nests? It was certain that the eggs were somewhere, therefore I returned to the marshes, determined not to leave a single square yard unexplored.

“As before, I put up plenty of Snipe and a number of Dunlins, all in beautiful summer plumage, and once more fell in with pairs of Phalaropes in all directions, but still there were no nests. Then, up to my knees in mud and water, I stood still, wondering, and, it must be confessed, not a little out of temper. Now, at the other end of the swamp, where there seemed to be no birds, was a quantity of drier ground, covered with moderately long withered grass, and intersected in every direction by numerous irregular natural drains, some not more than three feet wide, others as many yards, but all forming a network so close and intricate as to leave no piece of dry land larger than ten or twelve feet across. Again I set to work, not, it is true, with any great hope of success, but because I had fully resolved to examine the whole of the swamp, so that in case of failure there might at least be no after reproaches. Very soon I discovered what my error had been. First, I found a rough sort of nest, composed of dry grass, too small and too deep for a Dunlin’s, and therefore, in all probability, that of a Phalarope; then, within a few minutes, I discovered two more nests, newly commenced, but no eggs. Shortly afterwards I picked up the broken shell of a newly hatched egg, then fragments of three others, and close beside them a perfect nest. I carefully packed the fragments in a chip box, in order to convince sceptics, and then noted down the description of the nest. It consisted of nothing more than a cavity low down among the tall grass; deep in form, and rather neatly lined with blades of the same, most of which were broad and flat; at the bottom they formed a bed about half an inch in thickness; from the upper surface of this bed to the rim of the nest the height was nearly three inches, the width across the inner rim a little less than two inches. Very shortly afterwards, a male Phalarope rose unexpectedly, and alighted in the water about ten yards off. Marking the spot as closely as possible, I floundered through the muddy water, scrambled upon the little island, and soon afterwards, to my intense delight, discovered a nest and four beautiful eggs, all lying with their small ends meeting in the centre. They were hard set, but for all that, were a most valuable prize. The nest only differed from the last in having a few feathers, apparently from the breast of one of the birds, lying loosely inside.
After this I quartered about for a considerable time, and in the best of good tempers. I found some more half-finished nests, and a few deserted ones, and finally I discovered yet another nest containing four eggs, another with a single one, all quite fresh. Oddly enough, in this part of the swamp I saw but the one bird already mentioned, while in the furthest part, among the rushes, they were, as I have stated, abundant. I can only account for this by supposing that they had young ones which they had led away for concealment, and that the few birds which had eggs must have escaped my notice.

"The fresh eggs found in the second nest are of a pale yellowish olive green, spotted all over, but rather more so at the broad end, where the marks are also larger, with several shades of brownish and purplish grey and deep umber brown. All are of a lengthened pyriform shape; three measure one inch two lines in length by ten lines in breadth, but the fourth is one line longer and one line narrower. Those of the first set are not quite so sharply pointed; the ground-colour is warmer, and the markings are of a redder tinge. They all measure one inch three lines by ten lines. . . . .

"While wading in the swamp, the first indication I had of the presence of the birds was the peculiar note, heard singly at first from one individual; but afterwards it was echoed from all sides by numerous voices. I scarcely know to what the note can be likened except to the word quip, uttered rapidly several times in succession, and then after a pause again repeated. This seems to be common to both sexes, but as they take wing the male utters a sharper cry. Often, when closely pursued in the water, they utter a loud chattering noise, at the same time swimming almost as fast as one can wade."

Mr. H. Seebohm writes *:—"My son, who visited the Outer Hebrides last spring, has furnished me with the following particulars of the breeding of this charming bird on the island of North Uist:—'The Red-necked Phalarope is extremely common in North Uist, but, as far as I know, they are entirely confined to one colony in the north-west of the island. The place chosen by these birds as a breeding-ground is a large marsh about two miles from the sea, one mass of small pools and islands covered with grass. The nests are situated on the edge of the marsh on the dry ground; and although the water was alive with birds during my visit, I did not find a single nest on any of the small islands. The nest is simply a slight depression in the ground, very much like that of a Snipe, containing four eggs. As soon as the birds were disturbed from the

* 'History of British Birds,' vol. iii. p. 91.
nests they flew to the nearest pool of water, where they swam about quite unconcerned, throwing their little heads back, and ever and anon dipping their bills into the water, looking very much like a lot of miniature ducks. They were extremely tame, so much so that a dog we had with us caught several in its mouth. The note is a sharp *tweet, tweet.* They are said to arrive in North Uist about the end of May, leaving again early in the autumn. I visited the colony in the middle of June, and found most of the eggs pretty well incubated. There are also large colonies of Phalaropes breeding in the islands of Benbecula and South Uist."

Messrs. H. J. Pearson and E. Bidwell, referring to the nesting habits of this species as observed by them in Norway in 1893, write as follows *:—"Numerous on one of the Lofodens and in the Porsanger. They often nest quite on the edge of small tarns or peat-holes, in grass about 6 in. high; a few were in marsh ground covered with grass of same height; the nests were neatly made of fine grass, and rather deep in proportion to their width. In most instances where we saw this species there were three birds—two males and one female. Twice we saw parties of three birds each on the sea, feeding just behind the breakers; repeatedly we noticed three birds together on the wing; and nearly every time we came upon them in the small lakes of the tundra the party consisted of two males and one female. Can this species be *polyandrous?*"

Referring to this Phalarope the late Dr. T. M. Brewer writes †:—"Mr. MacFarlane found this species breeding in great abundance in the Arctic regions through which he passed, from the edge of the wooded country to the shores of the Arctic Sea. In more than fifty instances in which he made notes of its nests and eggs, he found the former to be mere depressions in the ground lined with a few dried leaves and grasses, and in almost every instance placed near the edges of small ponds; the number of the eggs was almost invariably four. The nests were seen from the 17th of June until into July, and in several instances perfectly fresh eggs were found as late as July 5. They were tolerably numerous in the wooded country, were also found in the Barrens wherever there were small lakes, and were not less frequently seen at the very edge of the Arctic Sea and on the islands off the coast. Sometimes the birds permitted the near approach of man without any noise or special manifestations of uneasiness; but at other times both parents would make great outeries, and fly from tree to tree in order to draw the intruder away from the nest."

Mr. E. W. Nelson gives the following account of the breeding habits of this

* "On a Birds'-nesting Excursion to the North of Norway in 1893," *Ibis,* 1894, p. 234.
† *'Water Birds of North America,'* vol. i. p. 335.
species as observed by him in Alaska *:— "As summer approaches on the Arctic shores and coast of Bering Sea, the numberless pools, until now hidden under a snowy covering, become bordered or covered with water; the mud about their edges begins to soften, and through the water the melting ice in the bottom looks pale green.

"The ducks and geese fill the air with their loud resounding cries, and the rapid wing-strokes of arriving and departing flocks add a heavy bass to the chorus which greets the opening of another glad season in the wilds of the cheerless north. Amid this loud-tongued multitude suddenly appears the graceful, fairy-like form of the Northern Phalarope. Perhaps, as the hunter sits by the border of a secluded pool still half covered with snow and ice, a pair of slight wings flit before him, and there, riding on the water, scarcely making a ripple, floats this charming and elegant bird. It glides hither and thither on the water apparently drifted by its fancy, and skims about the pool like an autumn leaf wafted before the playful zephyrs on some embosomed lakelet in the forest. The delicate tints and slender fragile form, combining grace of color and outline with a peculiarly dainty elegance of motion, render this the most lovely and attractive among its handsome congers.

"The first arrivals reach Saint Michaels in full plumage from May 14 to 15, and their number is steadily augmented until, the last few days of May and 1st of June, they are on hand in full force and ready to set about the season's cares. Every pool now has from one to several pairs of these birds gliding in restless zigzag motion around its border, the slender necks at times darting quickly right or left as the bright black eyes catch sight of some minute particle of food. They may be watched with pleasure for hours, and present a picture of exquisite gentleness which renders them an unfailing source of interest. The female of this bird, as is the case with the two allied species, is much more richly colored than the male, and possesses all the 'rights' demanded by the most radical reformers.

"As the season comes on when the flames of love mount high, the dull-coloured male moves about the pool, apparently heedless of the surrounding fair ones. Such stoical indifference usually appears too much for the feelings of some of the fair ones to bear. A female coyly glides close to him and bows her head in pretty submissiveness, but he turns away, pecks at a bit of food and moves off; she follows and he quickens his speed, but in vain; he is her choice, and she proudly arches her neck and in mazy circles passes and repasses close

* 'Report upon Natural History Collections made in Alaska between the years 1877 and 1881,' pp. 99, 100.
before the harassed bachelor. He turns his breast first to one side, then to the other, as though to escape, but there is his gentle wooer ever pressing her suit before him. Frequently he takes flight to another part of the pool, all to no purpose. If with affected indifference he tries to feed, she swims along side by side, almost touching him, and at intervals rises on wing above him and, poised a foot or two over his back, makes a half dozen quick, sharp wing-strokes, producing a series of sharp, whistling noises in rapid succession. In the course of time it is said that water will wear the hardest rock, and it is certain that time and importunity have their full effect upon the male of this Phalarope, and soon all are comfortably married, while *mater familias* no longer needs to use her seductive ways and charming blandishments to draw his notice.

"About the first of June the dry, rounded side of a little knoll, near some small pool, has four dark, heavily-marked eggs laid in a slight hollow, upon whatever lining the spot affords, or, more rarely, upon a few dry straws and grass-blades brought and loosely laid together by the birds. Here the captive male is introduced to new duties, and spends half his time on the eggs, while the female keeps about the pool close by. In due time the young are hatched and come forth, beautiful little balls of buff and brown."

"During incubation, if the nest is approached, the parent usually flies off the eggs when the intruder is some yards away, and proceeds to feed about the surface or edge of the nearest pool, as though nothing unusual had occurred. At times the parent shows a little anxiety, and swims restlessly about the pool, uttering a low, sharp, metallic 'pleep, pleep.' When a bird leaves the eggs it is usually joined at once by its mate. In one or two instances the parent bird came gliding stealthily through the grass to the nest while I was occupied in packing the eggs in my basket. Fresh eggs are rarely found after June 20, and by the middle to 20th of July the young are fledged and on the wing. By the 12th to 15th of July a few of the ashy feathers of the autumnal plumage appear, and soon after old and young begin to gather in parties of from five to a hundred or more, and seek the edges of large ponds and flats or the muddy parts of the coast and borders of tide creeks. During August and September they are found on the bays, and the last are seen about the last of September or first of October.

"Murdoch found it a rare summer visitant at Point Barrow, where it was noticed only once. They breed on all the islands of Bering Sea, the north coast of Siberia, and we saw them common about Herald and Wrangel Islands in July and August 1881. It is plentiful throughout the interior of Northern Alaska, as well as on the salt marshes of the coast. Dall saw it all along the Yukon, and found a nest with two eggs at Pastolik, near the Yukon mouth."
"The usual number of eggs is four, which vary considerably in exact coloration. The ground-color in the very large series before me, obtained in the vicinity of Saint Michaels, shades by every degree from greenish-clay color to warm, buffy, olive-brown. The spots and markings are very irregular in size and shape, but are usually larger about the large end of egg. These spots and blotches, which are rarely confluent, occupy about one-half the surface, and are from dark chocolate to very dark umber-brown. These eggs measure, taking extremes, 1·20 by .85; 1·16 by .87; 1·12 by .80; within which measurements will fall most of the eggs of this species. Like the Red Phalarope this species extends its winter range far south on the coasts of both continents. It is known among whalers and fishermen by the same name as its relative, and both unite in giving animation to many an otherwise lifeless and forbidding scene along our northern shore."

Referring to the large series of eggs of this species in the Smithsonian Institution, Washington, Dr. E. Cones states that their measurements are as follows:—"The longest and narrowest egg measures 1·30 inches by only 0·75; a short and thick one only 1·10 by 0·82; average about 1·20 by 0·80." *

Mr. H. Seebohm says the eggs "vary in length from 1·2 to 1·05 inch, and in breadth from .85 to .8 inch." †

Mr. H. E. Dresser states that the measurements of a large series of eggs of this Phalarope in his collection from the Outer Hebrides, Norway, the Faeroes, and Greenland, vary from 1·1 by .82 inch to 1·25 by .85 inch, and 1·17 by .85 inch. ‡

* 'Birds of the North-West,' p. 471.
† 'History of British Birds,' vol. iii. p. 91.
JACK SNIPE.
Gallinago gallinula. Linnæus
JACK SNIPE.

GALLINAGO GALLINULA, LINN. EUS.

EXPLANATION OF PLATE.

Figure 1. Sula-suo, North Finland, June 8, 1861; H. E. Dresser coll. In collection of H. E. Dresser, Esq.
" 2. Tifi jara, Tor Sieppi, June 14, 1854; J. Wolley coll. In collection of E. Bidwell, Esq.

The Jack Snipe is a regular winter visitor to the British Islands. A few individuals have been known to spend the summer in England, but there is no authenticated instance of its having nested in our islands.

Mr. Howard Saunders writes as follows, respecting the geographical distribution of the Jack Snipe *:—"In summer this species inhabits Scandinavia, especially to the north of the Arctic circle, and in Western Russia it nests as far south as St. Petersburg, though east of Archangel it appears to be unfrequent, and Messrs. Seebohm and Harvie-Brown did not observe it on the Lower Petchora. Putting aside unsubstantiated assertions respecting its supposed breeding below lat. 55°, it may be described as a bird of passage over the remainder of the Continent, becoming very numerous in the south—in some years even more so than the Common Snipe—during winter, at which season it visits North Africa.

* 'Manual of British Birds,' pp. 559, 560.
and Egypt, where it sometimes remains as late as May; it also ascends the Nile to Abyssinia. In Asia it breeds on the tundras of Siberia as far north as lat. 70°, migrating to Japan and even Formosa in the cold season, as well as to Tenasserim and the rest of the Indian region, Persia, and Turkestan; as yet, however, it has not been traced across the Pamir or other lofty ranges."

The late Mr. John Wolley obtained the first thoroughly identified eggs of the Jack Snipe in Lapland. He communicated the following account of his discovery to the late Mr. W. C. Hewitson, who published the same in his 'Eggs of British Birds' *:—"I scarcely like to tell you about the Jack-Snipe, anything I can say must be so poor an expression of my exultation at the finding of this long wished-for egg. It was on the 17th of June, 1853, in the great marsh of Muonioniska, that I first heard the Jack-Snipe, though at the time I could not at all guess what it was; an extraordinary sound, unlike anything I had heard before, I could not tell from what direction it came, and it filled me with a curious surprise; my Finnish interpreter thought it was a Capercally, and at that time I could not contradict him, but soon I found that it was a small bird gliding at a wild pace at a great height over the marsh. I know not how better to describe the noise than by likening it to the cantering of a horse in the distance, over a hard, hollow road; it came in fours with a similar cadence, and a like clear yet hollow sound. The same day we found a nest which seemed to be of a kind unknown to me. The next morning I went to Kharto Uoma with a good strength of beaters. I kept them, as well as I could, in a line,—myself in the middle, my Swedish travelling companion on one side, and the Finnish talker on the other. Whenever a bird was put off its eggs, the man who saw it was to pass on the word, and the whole line was to stand whilst I went to examine the eggs and take them at once, or observe the bearings of the spot for another visit, as might be necessary. We had not been many hours in the marsh, when I saw a bird get up, and I marked it down. . . . The nest was found . . . . . A sight of the eggs as they lay untouched raised my expectations to the highest pitch. I went to the spot where I had marked the bird, put it up again, and again saw it, after a short low flight, drop suddenly into cover. Once more it rose a few feet from where it had settled. I fired! and in a minute had in my hand a true Jack-Snipe, the undoubted parent of the nest of eggs! . . . . As usual, I took measures to let the whole party have a share in my gratification before I again gave the word to advance. In the course of the day and night I found three more nests and examined the birds of each. One allowed me to touch it with my hand before it rose, and another only

got up when my foot was within six inches of it. It was very fortunate I was able to identify so fine a series of eggs, for they differ considerably from one another. I was never afterwards able to see a nest myself, though I beat through numbers of swamps; several with eggs mostly hard sat upon were found by people cutting hay in boggy places in July. I have spent a good many hours this present year (1854) in the same Kharto Uoma without finding one, though I had plenty of men and boys in good working order. There have certainly been but few Jack-Snipes in the country this season.

"The nest of the 17th, and the four of the 18th June, were all alike in structure, made loosely of little pieces of grass and equisetum not at all woven together, with a few old leaves of the dwarf birch, placed in a dry sedgy or grassy spot close to more open swamp. . . . It was not long after I heard it that I ascertained that the remarkable hammering noise in the air was made by the Jack-Snipe."

Mr. W. Meves, who examined a series of eggs of the Jack Snipe, has published a description of them, which I translate as follows *:—"As I have had an opportunity of examining a large number of clutches from Torneå Lappmark, which were collected at the end of June or even at the beginning of August, I am enabled to give the following description of them:—No. 1: 4 eggs; ground-colour greyish-yellow, with greyish-violet underlying markings, large and small leather-brown blotches, spots, and detached streaks, becoming confluent at the larger end; a 1·53 by 1·02 inch, b, c and d 1·51 by 1·06 inch. No. 2: 4 eggs; colour like the last, but the blotches smaller; a 1·49 by 1·08 inch, b 1·47 by 1·10 inch, c 1·47 by 1·06 inch, d 1·47 by 1·02 inch. No. 3: 3 eggs; two were dark greenish-grey, the third rusty-yellow; the blotches large, rather sparsely distributed; all were of equal size, 1·45 by 1·06 inch. No. 4: 3 eggs; greyish-yellow, with irregular markings, distributed in many scrolls and streaks, giving them a close resemblance to eggs of *Eldinemus crepitans*; a 1·57 by 1·08 inch, b 1·53 by 1·06 inch, c 1·45 by 1·02 inch. No. 5: 3 eggs; whitish-grey, with ash-grey, light and dark brown blotches and spots, very similar in colour to eggs of *Scolopax major*; all of equal size, 1·49 by 1·10 inch. No. 6: 4 eggs; ground-colour greenish-white, with rather dark, sparsely distributed blotches, having some resemblance to eggs of *Totanus glareola*, 1·47 by 1·06 inch to 1·49 by 1·08 inch. No. 7: 4 eggs; somewhat darker than the last; 1·55 to 1·57 by 1·08 inch. No. 8: 4 eggs; ground-colour a pretty, bright, olive-green, 1·45 by

* "Ornithologische Beobachtungen im nordwestlichen Russland," 'Ornis,' II. Jahrgang, 1886, pp. 262, 263.
1-06 inch, to 1-53 by 1-08 inch. No. 9: 2 eggs; olive-yellow with bright brown and blackish-brown blotches, sparsely distributed; a 1-53 by 1-14 inch, b 1-49 by 1-06 inch.

"The nests were mostly found on large marshes, during the hay-cutting. The bird is said to sit so closely, that it is often wounded by the scythe."

To this description Mr. E. F. von Homeyer adds the following note, which I translate *:—" I have already spoken of the extraordinary tameness of this bird at the nest. I found a nest in a marshy peat-moor on a bank between the pools, and later in the same locality I found young not quite fledged, and still having much down, especially about the head, and which today, after 43 years, still adorn my collection."

From Mr. Meves's description it will be seen that these eggs varied in length from 1-57 to 1-45 inch, and in breadth from 1-14 to 1-02 inch.

Mr. H. Seebohm writes †:—"A full clutch of eggs of the Jack Snipe is always four. The ground-colour goes through precisely the same variations as that of the Common Snipe's eggs, but the blotches and spots are a richer brown and not, as a rule, quite so bold. The underlying markings are large and very distinct. The eggs are remarkably large for the size of the bird, and vary in length from 1-56 to 1-45 inch, and in breadth from 1-1 to 1-02 inch. On an average, the eggs of the Jack Snipe are a little smaller than those of the Common Snipe; but it is impossible to give any character by which they may with certainty be distinguished from them. Some varieties of those of the Dunlin resemble those of the Jack Snipe, but may be distinguished by their smaller size. Eggs of the Buff-breasted Sandpiper are absolutely indistinguishable. It is not known that the Jack Snipe rears more than one brood in the year."‡

* Loc. cit. p. 263.
† 'History of British Birds,' vol. iii. p. 249.
‡ Mr. E. F. von Homeyer, however, states that eggs of this species found in August belong to a second brood ('Ornis,' II. Jahrgang, 1886, p. 262).—F. P.
BONAPARTE'S SANDPIPER.

Tringa fuscicollis, Vieillot.
BONAPARTE’S SANDPIPER.

Scolopacidae.

TRINGA FUSCICOLLIS, Vieillot.

EXPLANATION OF PLATE.


This American species is a rare accidental visitor, there being about a dozen records of its occurrence in England and one in Ireland.

Mr. Howard Saunders writes as follows respecting the geographical distribution of this species*:—“On the Continent of Europe this Sandpiper has not yet been observed, for the T. schinzi of Brehm and some other ornithologists is a small form of the Dunlin; our bird is, however, the T. schinzi of Bonaparte, and under the name of Schinz’s Sandpiper was figured and described in the 1st, 2nd, and 3rd editions of ‘Yarrell.’ It is said to have occurred at Reykjavik, Iceland, in June 1860, and is certainly found in Greenland early in the autumn, while generally distributed during summer throughout the Arctic regions of America as far west as the Mackenzie region, where it breeds abundantly; but in Alaska it is rare, only two specimens having been obtained by Mr. Murdoch at Point Barrow. On migration it is common in the Mississippi valley, and along the whole Atlantic coast to Florida; ranging southwards to the West Indies, Central America, Colombia, Brazil, the River Plate States, the Falkland Islands, the Straits of Magellan, and on the Pacific side, to Peru and Chili.”

Mr. R. MacFarlane, referring to this species, writes†:—“Several nests of this Sandpiper were found on or near the Arctic coast of Franklin Bay. One of these taken July 3 contained four eggs with very large embryos. Another discovered on the following day held but three eggs. A third found in the Barren Grounds on 29th June was, like the rest, a shallow cavity in the ground, lined with a few decayed leaves, containing four eggs, also having very large embryos.

A fourth, obtained on the banks of a small river, held four eggs whose contents were, however, in a far less developed condition than the others."

The late Dr. T. M. Brewer, describing the eggs of this Sandpiper, writes *:—

"Eggs of this species found on the Barren Grounds, near the Arctic coast, by Mr. MacFarlane (S. I. No. 11329), are pyriform in shape, and have a ground-color of a rufous drab marked with bold patches of dark sepia brown, interspersed with spots in which this shade is deepened almost into blackness, and which are collected in confluent groupings around the larger end. These eggs measure 1·35 inches in length by '95 in breadth."

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* 'Water Birds of North America,' vol. i. p. 220.
AMERICAN STINT.

Tringa minutilla (Vieillot).
AMERICAN STINT.

TRINGA MINUTILLA (Vieillot).

Explanation of Plate.

Figure 1. June 9, 1880. No. 21331 U.S. National Museum Coll.


St. Michaels, Alaska.

E. W. Nelson coll.

Only two occurrences of this species in the British Islands are recorded, one in Cornwall and the other in Devonshire.

With reference to the geographical distribution of the American Stint, Mr. Howard Saunders writes *:—"This small Stint, called by American ornithologists the Least Sandpiper, is widely distributed throughout the Arctic portions of the New World, breeding as far south as Sable Island—a little below Nova Scotia, as well as in Newfoundland, Labrador, and the higher regions generally to Alaska. A limited number winter in the Gulf States, but the majority pass onward to Mexico, the West Indies, Central America and Brazil. In autumn large flocks take an easterly direction as far as the Bermudas, while on the west side the species is extremely common in Southern California."

Audubon, who found the American Stint breeding in Labrador, writes as follows †:—"That this species is naturally disposed to seek alpine sections of the country for the purpose of reproduction, I obtained abundant proof whilst in Labrador, where I found it plentiful, and breeding on the moss-clad crests of the highest rocks, within short distances of the sea. There are means through which the experienced student of Nature may discover the hidden treasures of birds of this family, which to others would prove useless, and which I shall here point out.

* 'Manual of British Birds,' p. 573.
† 'Ornithological Biography,' vol. iv. pp. 181, 182.
At all periods, excepting those at which they have nests containing eggs, or young so small and delicate as to require all the care of their parents, the flight of the present species usually resembles that of the Common Snipe, *Scolopax wilsonii*; but when startled from the nest, or from any place in its immediate vicinity, it rises on wing, and moves off low over the ground with deeply incurved wings, and with a whirring motion of these organs, which, if as rapid as that of a Partridge, would appear quite similar; but, on such occasions, our bird moves slowly before you, and instead of uttering the note of independence, as it were, which it emits at other times while freely and fearlessly travelling, it gives out sounds weakened as if by grief or anxiety, for the purpose of inducing you to follow it. If on the ground, it acts in a similar manner, moves off slowly, and limping as if crippled, and this at times quite as much as if you had really come upon it while on its nest, or surprised it with its young. On all such occasions, Reader, you ought to mark well the spot from which the bird has started, and, to assure yourself that your eye may not be deceived, throw your cap or hat at your feet to serve as a beacon, should necessity afterwards call for it, to guide you around the place until you have discovered the nest which you are desirous of seeing.

"Through these means, on the 20th of July 1833, I after some search found the nest and eggs of this species. The birds flew, to use the words of my Journal, like Partridges, and not like Tringas. I marked them well, for both the female and the male flew from near the nest, and having left my fisher's hat where I then stood, I walked carefully over the moss hither and thither, until at last I came upon the spot. My pleasure would have been greatly augmented had any of my young companions been near; but the sailors who had rowed me to the foot of the rocks exhibited little more delight than they would have done on finding that their grog had been stopped. For my part, I felt as happy as when, on the same coast, I for the first time saw the nest and eggs of the Black-crowned Warbler, of which you have read an account in the second volume of this work. Four beautiful eggs, larger than I had expected to see produced by birds of so small a size, lay fairly beneath my eye as I knelt over them for several minutes in perfect ecstasy. The nest had been formed first, apparently, by the patting of the little creature's feet on the crisp moss, and in the slight hollow thus produced were laid a few blades of slender dry grass bent in a circular manner, the internal diameter of the nest being two inches and a half, and its depth an inch and a quarter. The eggs, which were in shape just like those of the Spotted Sandpiper, *Totanus macularius*, measured seven and a half eighths of an inch in length, and three-fourths of an inch in breadth. Their ground-colour was a rich creamy-yellow
AMERICAN STINT.

3

tint, blotched and dotted with very dark umber, the markings larger and more numerous towards the broad end. They were placed with their pointed ends together, and were quite fresh. The nest lay under the lea of a small rock, exposed to all the heat the sun can afford in that country. No sooner had the little creatures felt assured that I had discovered their treasure, than they manifested a great increase of sorrow, flew from the top of one crag to another in quick succession, and emitted notes resembling the syllables peep, peet, which were by no means agreeable to my feelings, for I was truly sorry to rob them of their eggs, although impelled to do so by the love of science, which affords a convenient excuse for even worse acts.

"This pair, however, would seem to have been late in depositing their eggs, for on the 4th of August my party and myself saw young birds almost as large as their parents, and agreeing in almost every point with the descriptions given of Tringa temminckii. Many small flocks of these birds, consisting of old and young, were already departing from Labrador, and were seen on all our excursions. On the 11th of August we also found adult and young in great numbers. But not a single newly hatched individual of this species could I procure, while the young of the Ring Plover were very abundant."

Referring to the American Stint, the late Dr. T. M. Brewer writes* :—"This species was found breeding abundantly at Fort Anderson, on the Barren Grounds, at Lake Rendezvous, and near the Arctic Coast, by Mr. MacFarlane. Of the twenty nests, the notes of which we have examined, all but six were taken between the 21st and 30th of June, none being recorded as later than the 3rd of July. The number of eggs is generally given as four—in no instance more. The nests were always on the ground, and generally a mere depression, with a lining of a few dry leaves and grasses, and usually near small lakes. The female, as she fluttered off her nest, often imitated the flight of a wounded bird, and if left undisturbed, almost immediately returned to her nest. If persistently interrupted, she kept about the nest, and endeavoured by simulated lameness to draw off the intruders, soon becoming quite wary, if shot at.

"One set of the eggs of this species, collected near the Arctic coast by Mr. MacFarlane (S. I. No. 9377), measure 1.15 inches by .85. The ground is a light drab, thinly marked with sepia-brown spots, patches of which are suffused with the ground-color, giving them an ashy effect. The markings are more numerous, and of greater size about the larger end. The eggs are decidedly pyriform in shape. Another set (S. I. No. 3324), collected on Sable Island, Nova Scotia, by

* 'Water Birds of North America,' vol. i. p. 240.
P. S. Dodd, have a light-drab ground-color; but this is almost entirely concealed by the numerous markings of dark umber brown."

Mr. Seebohm says that the eggs of the American Stint "vary in length from 1·15 to 0·95 inch, and in breadth from 0·85 to 0·75 inch." *

* 'History of British Birds,' vol. iii. p. 216.
RUFF.
Machetes pugnax (Linnaeus).
RUFF.

Scolopacidae.

MACHETES PUGNAX (Linnaeus).

EXPLANATION OF PLATE.

Figure 1. Falkenswaard, North Brabant, June 22, 1891.


,, 7. Falkenswaard, North Brabant, June 19, 1891.

,, 8. Kaaressuando, Tornea Lappmark, June 12, 1893.

,, 9. Tornea Lappmark, June 21, 1892.


,, 11. Falkenswaard, North Brabant, June 14, 1891.


The Ruff is a rather rare spring and autumn migrant to the British Islands, a few pairs probably remaining to breed in Norfolk.

Mr. H. Seebohm writes*: — "The Ruff is a rare summer migrant to the British Islands, a few pairs still occasionally breeding in the Norfolk broads; but it is more abundant on spring and autumn migration. Formerly it bred in great numbers in most of the marshy districts of England, from Northumberland southwards. In Scotland and Ireland it occurs regularly on migration, and it is occasionally seen on the Orkney and Shetland Islands.

"The Ruff is a west Palaearctic species, breeding as far north as land extends, as far south as the valley of the Danube and the Kirghiz Steppes, and as far east as the Taimur peninsula and West Dauria, where it reaches to and probably breeds in the upper valley of the Amoor. It passes through the basins of the Mediterranean, Black, Caspian, and Aral Seas on migration, and winters in suitable localities through Africa, Northern India, and Burma. Like many other Waders, it occasionally straggles far and wide during winter. A single example has occurred in

* 'History of British Birds,' vol. iii. pp. 113-115.
Ceylon and another on the north island of Japan, whilst others have been obtained in the United States of America (Maine, Massachusetts, New York, and Ohio) and in Spanish Guiana. Pallas says that it was not rare in Kamtschatka, but subsequent travellers have failed to meet with it. The Ruff has no near ally.

"The Ruff reaches its breeding-grounds somewhat late in spring. Naumann says that in Germany the males arrive during the first half of May, and the females during the second half of that month; that the males leave in August, but the females and young not until September. At Valconswaard I saw the first flock of males on the 13th of May; but we took three nests on the 20th and 21st, one of them a full clutch, so that they apparently begin to breed soon after their arrival. Irby says that they pass the Straits of Gibraltar from January to the end of May, the later flocks being doubtless those breeding in the high north. On the Arctic Circle, in the valley of the Petchora, Harvie-Brown and I saw the first Ruff on the 30th of May, and took the first nest on the 12th of June. In the same latitude, in the valley of the Yenesay, the Ruff arrived on the 9th of June, and eggs were taken four degrees further north on the 1st of July.

"There are two points of special interest attaching to the history of the Ruff, which are probably intimately connected with each other. One of these is the extraordinary variety of the plumage of the males in the breeding-season, and the other is the fact that the Ruff is polygamous. It is said that the females largely outnumber the males. Naumann estimates the proportion at three to one, and this discrepancy is confirmed by African collectors. The males contend in single combat for the right of being 'cock of the walk'; and for this purpose battlefields are chosen, like the 'laking-places' of the Capercaillie and the Blackcock. These are sometimes on a slight elevation, but usually are nothing more than a spot of open ground in the marsh where a patch of level short grass is to be found, four or five feet across, and so situated that it may be exposed to the view of the admiring females. The same piece of ground is chosen year after year, and Naumann mentions an instance of one which had been thus used for half a century. Frequently two or three duels are going on at once on the ground, but they seldom last long. After what looks like furious sparring, the weaker cock retires from the 'hill,' seldom any worse for the fray, and the conqueror awaits another foe. These cock-fights are not commenced until the ruff or collar is fully grown, which is seldom before the middle of May, and are discontinued as soon as the feathers on the neck begin to fall out, which happens about six weeks later. Soon after sunrise is the best time to observe them, but I have watched them in Russia and in Holland as late as eleven in the forenoon. The excitement of the birds is intense; they stoop with their heads low and their ruffs expanded,
and fly at each other like game-cocks, but, unlike those birds, they fight with the
bill and not with the foot. The warts on the side of the face of the Ruff only
remain during the spring, and doubtless serve as a protection against the sword-
thrusts of their adversaries.

"Except during the month or so when the males 'bill,' the Ruff is not very
gregarious at its breeding-grounds; solitary birds are often seen, but three or
four together is not unusual. No bird is more conspicuous than the Ruff during
the breeding-season. It frequents for the most part the swampy portion of the
moors, where its divers gay colours contrast strongly with the light green of the
wet grass, and where there is little or no cover. Even in places where the moors
are close to the sea, it does not feed on the sands, and seldom frequents the mud-
flats, but prefers to feed in fresh water, where it picks up worms, slugs, and insects
of all kinds.

"After the male has lost his ruff he appears also to lose all interest in his
Reeves, and to take no part in the care of the family. The Reeve alone builds
the slight nest, incubates the eggs, and takes care of the young. The nest is on
the ground, in the middle of the swamp, where you have to splash through the
water among rushes, sedge, and coarse grass, in the midst of a clump of which a
depression is found, and roughly lined with dead grass and sedge. The nest is very
difficult to find, but the bird sits close and reveals her treasures as she flies away.
Both the Ruff and the Reeve are very silent birds; I have never heard them utter
a note, but on migration they are said to have a low call-note, like the wick of the
Sanderling, Phalarope, and Little Stint.

"The eggs, in a full clutch always four in number, are somewhat similar to those
of the Great Snipe, indeed some are absolutely indistinguishable from them; but
as a rule they are smaller and greener. The ground-colour varies from an almost
neutral pale grey to pale greenish grey; the overlying spots are reddish brown,
and the underlying spots pale greyish brown. The spots are not quite so bold as
those on the eggs of the Great Snipe, but they are equal in size to those on most
Sandpipers' eggs, and are occasionally confluent at the large end. The eggs vary
in length from 1.8 to 1.6 inch, and in breadth from 1.3 to 1.15 inch."

Mr. H. E. Dresser states that eggs of this species in his collection measure
from 1.75 by 1.25 inch to 1.65 by 1.17 inch. *

The late Mr. E. T. Booth writes †:—"When I first visited Hickling Broad,
in the east of Norfolk, in May 1870, there were several Ruffs and Reeves on the

† 'Rough Notes on Birds observed in the British Islands,' vol. ii.
hills; the Redshanks and Peewits, however, by dashing down and screaming, disturbed them whenever an attempt was made to get within range.

"On the 20th of June four very handsome glossy eggs were taken off Rush Hills. The eggs of another nest were removed a week later from the same piece of ground, as there was but little doubt they would have been taken on such an exposed spot. These I placed in the nest of a Partridge well concealed in long grass, on a marsh in a quiet part that was seldom visited, in hopes the young birds might be hatched. The old bird performed her duties well, sitting closely, and the downy juveniles would soon have been out, when a donkey, turned out to pick up his living on the marsh, trampled on the nest and broke most of the eggs. The Reeve belonging to the last-mentioned nest was shot and sent to be preserved, as I imagined it was too late in the season to expect her to lay again."
COMMON CURLEW.
Numenius arquata (Linnaeus)
COMMON CURLEW.
Numenius arquata (Linnaeus).
COMMON CURLEW.

Scolopacidæ.

NUMENIUS ARQUATA (Linnaeus).

EXPLANATION OF PLATES.

Figure 1. North Wales, May 25, 1878.
,, 2. Loch Broom, Perthshire, May 23, 1891.
,, 7. Middle Hill, Strath Tay, Perthshire, May 16, 1891.
,, 8. Loch Awe, May 18, 1883.

In collection of
H. Massey, Esq.

This species is a common resident, breeding in many moorland districts in England and more freely in Wales, Scotland, and Ireland.

The late Dr. Saxby writes as follows, respecting the breeding habits of the Curlew as observed by him in Shetland *:—"About the middle or end of April the flocks break up and pair, retiring immediately to the moors, where for some days they may be seen flying very high, uttering their far-resounding cries, and, like certain other bipeds who at such times indulge in flights of fancy, seeming to care very little for food. Laying generally begins about the middle of May; but I have taken eggs as early as the 2nd of that month, and as late as the end of June. During the period of incubation the male is constantly on the alert, usually taking his stand upon some commanding eminence, from whence, concealed by the grass or heather, he can observe the approach of an enemy long before he himself can be seen; then with loud cries he springs up; he is joined by others—for more than one pair is commonly found upon the moor—and the noisy birds soar screaming overhead in every direction. Sometimes the female takes alarm with the rest, but this, so far as I have observed, is when she has been sitting for a few days only; and hence it is that when she is found upon the eggs they are nearly always in a somewhat advanced stage of incubation.

* 'Birds of Shetland,' pp. 190–192.
The nest is generally more or less well lined with grass, sometimes with a little moss in addition. Much care does not appear to be bestowed upon its concealment, but I have upon occasion seen it very snugly placed in a large tuft of tall grass. As in the case of the Oyster-catcher, different statements are made by authors as to the number of eggs laid by the Curlew, some maintaining it to be three, others four. Mr. Gray, however, throws an unexpected light upon the matter, thus:—'From Mr. Harvie-Brown's journals I learn that in Sutherlandshire, where the Curlew is local, though common in the districts it frequents, four eggs are almost invariably found in the nest, three being the usual number taken in nests throughout the midland and southern counties ('Birds of the West of Scotland,' p. 288). In Shetland four is by far the more usual number, a nest with no more than three eggs being merely found now and then.

"The eggs of the same nest mostly resemble one another in colour and shape, but very singular varieties will sometimes occur. I have some which are even longer than the specimen figured by Mr. Hewitson, others no longer than Whimbrel's, from which, however, their greater breadth always distinguishes them. One taken in Yell has the blotches unusually large, and deviates so far from the usual, almost invariable, pyriform shape, that its outline nearly resembles that of an egg of the Herring Gull. Another from the same place is of a very peculiar grayish-brown colour, nearly as dark as a Red-throated Diver's egg, and obscurely spotted with two darker shades of the same tint. The young are difficult to find, and nearly as difficult to overtake, even when only a few hours old."

I am indebted to Mr. H. S. Davenport for the following extract on the Common Curlew from his "Original Sketches of British Birds," shortly to be published:—"However, if the species is well able to take care of itself as a general rule, it throws off much of its wild nature in the nesting season. In the spring of 1894 I had abundant experience of the breeding economy of the Curlew, and I found no less than half-a-dozen nests, all containing the full complement of eggs, in the space of 24 hours. In one instance the old bird kept on flying about within a few yards of me, and once nearly dashed my hat off; occasionally it varied the entertainment by settling on the ground and progressing leisurely towards me, crying piteously all the time. Needless to say, the eggs were very much incubated and that I did not disturb them.

"Both in 1894 and 1895 I found several nests belonging to this species on the uplands of North Wales; they were invariably placed on the dry herbage, not in swampy places. The best mode to discover them on a wide, open expanse of ground is to approach very cautiously and keep a good look-out with a pair of
field-glasses. After having taken your bearings and 'spotted' the probable whereabouts of a nest to the best of your ability, it only remains to institute a methodical search as is customary when looking for Lapwings' eggs. I am quite sure that in nine cases out of ten it is lost labour going to work on a haphazard principle. Only when the eggs are on the point of delivering up their contents will an old Curlew cling to them until your approach is so imminent as to make the ultimate discovery of the nest an easy matter. Not seldom the cries of other Curlews and their whisking flight round and about tend very materially to confuse those intruding on their breeding-haunts.

"The third week in April is about the best time for securing fresh eggs—at least, this is my experience of birds that annually breed on the waste lands of Merionethshire. The note, when the nest is invaded and the scared bird settles again at no great distance, is frequently a very sad kind of *pee, pee, pee*. One nest that I found on May 7, 1895, was on the side of a mound, a very neatly rounded cavity being sparingly filled with short beuts culled from close by, and strips of dry moss, which substance I have observed to be more or less utilised in every nest I have examined. Bits of down appear after the bird has been sitting for any length of time, as in the case of the Sparrow-Hawk under similar conditions. I think the foregoing is a very reliable description—and one that I have frequently confirmed—of a typical nest of the Common Curlew. It was written, like the descriptions of many nests belonging to other species, actually on the spot where I found the eggs.

"The bird as a general rule quits the nest in silence, flying direct; keeping low, she describes a great wide circle, eventually rising high in the air and wheeling about, uttering plaintive cries. Occasionally she will come back and settle near you, and in one instance I virtually trampled on a sitting bird before she moved. The eggs were on the point of hatching, and the Curlew merely flew the length of a fishing-rod and then stalked disconsolately away, pausing every two or three yards to look back at me and utter her characteristic wailing note. Incubation lasts for a full month, and the young leave the nest in 24 hours. The rippling cry of the Curlew in the spring of the year is one of the most delightful sounds in Nature."

Mr. Abel Chapman gives the following details respecting the nidification of this species* :—"The Curlews are not at all particular as to site; their nest is usually high up on the hills, but grass or heather, long or short, bare or dry ground, or bog—all seem to suit them alike. Even when the nest is among

long heather, there is no premeditated attempt at concealment. The old Curlew relies on her watchful nature and keen eye for safety, and rarely sits close when danger threatens, however distant; though, from her size and light colour, it is not difficult to find the nests, when one knows how to look for them. The four eggs are laid in the final days of April, one or two being often unfertile. The young Curlews do not leave the nest immediately on being hatched, as the young of most of this class of birds do; for, though they may never be found actually in the nest, yet they will be lying hidden in the heather close by, having just slipped out on the approach of danger. This, of course, only applies to the early days of their lives."

Mrs. J. E. Panton has published the following interesting account of the discovery of a nest of the Curlew in Dorsetshire *:—"For four years running a pair of Curlews had built in the bog between the hills or mounds in the heath, but this year they had deserted the old spot, and no one had been able to discover the nest. Long had we lain watching the ways of the birds: we had noted how the male bird had stood motionless on the highest of the mounds, and how the moment we came in sight he signalled to the female bird, who seemed to rise from her nest at the sound and at once fly away; we had made for the spot at once from whence we had seen her fly, but all our efforts up to the present had been in vain, principally because we had invariably searched the bog itself, and had not thought of the hills.

"The female Curlew never rises straight from the spot where she is sitting, but scuttles along the ground until she is quite fifty yards from her nest, when she at once flies away as fast as she can go. This naturally makes it a most difficult task to find the nest; and, indeed, until about four years ago, it was supposed never to build in the south of England. We were most anxious to find the nest, and as we stalked the bird, creeping almost level with the heath, we took care to be on the windward of the male, who was keeping his usual look-out. Presently he uttered his signal, and to our intense joy the female rose almost between our feet, and then we saw that we were close upon the nest itself, as, coming up as we had done, she had not had time to keep along the ground, and so had flown up direct from her nest.

"No better spot for observation could possibly have been selected. The hills sloped in a semicircle behind, and in front the view extended over the sea itself: the landing-place, and away to the shores beyond, where the Herons stood like sentinels watching for the fish; so every boat that passed, every man who

* 'Country Sketches in Black and White' (London: David Bogue, 1882), pp. 63, 64.
landed, must all be seen by the sitting bird; while the back of the hills was watched by the male bird, who from his elevated station could see everything that came on either side. The nest itself was simply formed by the bird scratching a round hole, the front being level with the ground, and the back raised a little, doubtless by the action of sitting, while the eggs were almost the colour of the heath, being dark green spotted with brown, and laid point to point in the small hollow that was sparsely lined with dead fern and morsels of stick. No two eggs were alike, and they were not very warm, but we took out four, and felt as pleased as if we had come into a fortune."*

Messrs. Macpherson and Duckworth give the following information respecting the breeding of this species in Cumberland†:—"The Curlew is an abundant resident, nesting plentifully on our fells and inland mosses, and in lesser numbers in fields and mosses near the coast. A pair generally nestle in a rough strip of waste land within three miles of Carlisle. The nest of the Curlew is a slight depression with a scanty lining, and four eggs constitute a clutch. On the lower grounds, the eggs are generally laid during the latter half of April; but during the present spring (1885), we examined fresh eggs on Glasson moss in the first half of May, and on the eastern fells we once found a clutch of fresh Curlew eggs at the beginning of June. The nests are more frequently situated on the edge of a moss, or in some rough meadow adjoining, than in the centre of the waste. The young run at the end of May and the beginning of June. From their acuteness in hiding, they are more difficult to find than the nests, but neither can be found, except accidentally, unless the movements of the old Curlews be carefully studied."

Mr. H. E. Dresser states‡ that a considerable series of eggs of this species in his collection, from Finland, Scandinavia and Scotland, vary in colour "from light greenish spotted with small dark umber-brown surface-blotches and purplish-brown underlying shell-markings to dark olive-brown, almost covered with dark umber-brown blotches, which are especially numerous at the larger end." He further states that the measurements of these eggs vary from 2·77 by 1·9 inch to 2·62 by 1·8 inch; also that 25 eggs measured by Dr. E. Rey averaged 2·64 by 1·86 inch, the largest measuring 2·97 by 1·87 inch, and the smallest 2·36 by 1·79 inch.

* In 'The Field' of September 9th, 1882, Mrs. Panton affirms the truth of this narrative. In the same periodical, under date August 19th, 1882, Prof. Newton confirms, from his own observation, the statement that the Curlew has been known to breed in Dorsetshire.—F. P.
† 'Birds of Cumberland,' pp. 162, 163.
‡ 'History of the Birds of Europe,' vol. viii. p. 252.
Mr. H. Seebohm writes*—"The eggs vary considerably in shape, some being much rounder than others, but they are usually pyriform; they vary in length from 2·8 to 2·45 inch, and in breadth from 1·95 to 1·75 inch. The only eggs at all likely to be confused with the Curlew's are those of the Whimbrel; but the latter are readily distinguished by their smaller size. Both birds appear to assist in the duties of incubation, but the female performs the greater share. Only one brood is reared in the year; but if the first eggs are taken, others, in many instances, are laid."

* 'History of British Birds,' vol. iii. p. 97.
ESKIMO CURLEW.
Numenius borealis (J. E. Forster).
ESKIMO CURLEW.

Scolopacidæ.

NUMENIUS BOREALIS (J. R. Forster).

EXPLANATION OF PLATE.

Figure 1. Lower Anderson River, British N. America, 1865; R. MacFarlane coll. No. 14096 U.S. National Museum Collection.

This American species is a rare accidental visitor to the British Islands.

Mr. Howard Saunders writes *:—"The Eskimo Curlew appears to be merely a visitor to Greenland, but is widely distributed during the summer throughout the Arctic regions of America from Hudson Bay to Alaska; only a few, however, remain to breed in the latter as far south as St. Michael's, though northward this is the most abundant member of the genus. It has wandered to the Pribilov Islands, but its representative in Northern Siberia—and southward to Australia in winter—is *N. minutus* of Gould, a slightly smaller species, which has paler and less barred under parts, and moreover has the back of the tarsus scutellated like the front—as in Totanus; in the American bird the hind tarsus is reticulated, as in other members of the genus Numenius. Although the Eskimo Curlew has been obtained in the Galápagos Islands, and also on the coast of Chili, it does not appear to pass down the Pacific sea-board of North America; its line of flight being rather to the eastward of the Rocky Mountains. Immense numbers migrate through the Mississippi valley, but none winter there, nor is a long stay made in any part of the United States to the north of Texas; some visit the Bermudas, while others pass southward as far as Patagonia and the Falkland Islands."

* 'Manual of British Birds,' pp. 615, 616.
The late Dr. T. M. Brewer writes as follows, with reference to the breeding habits of this species * :— "Mr. MacFarlane met with this species breeding in great abundance throughout the Barren Grounds up to the Arctic coast, but it was not met with before entering these grounds. The nests—which were found from about June 20 to July 10—were in every instance mere holes in the ground, lined with a few decayed leaves and having a thin sprinkling of hay in the centre. It was very difficult to detect the nest of this species, as the parent bird glides off long before a near approach, and the eggs closely resemble the grass in their colors. This species was very numerous in the Barrens. The female, soon after leaving her nest, usually ascends into the air in a straight line. The young birds leave the nest as soon as hatched, and when approached, hide themselves in the grass, and can be found only with the greatest difficulty. Some were already hatched by July 12."

"The eggs of this species exhibit very great variations in size, colors, and distribution of markings. In No. 9431 (S. I.) the ground is a pale greenish-ash, with large oblique blotches of different shades of sepia, the lighter inclining to a purplish-slaty tint. In No. 14099 (S. I.) the ground is of a deep muddy or clay-colored drab. The markings are chiefly toward the larger end, where they are confluent on the apex, are of an umber tint varying in the depth of the shade. In No. 9432 (S. I.) the ground is a deep olivaceous drab, and the markings, of a very dark sepia-color, and in the form of irregular small blotches, more numerous toward the larger end. In No. 11401 the ground is a light ashy-green color, and the markings are smaller, more numerous, more longitudinal, and of a much lighter shade of sepia. These eggs are of an oblong-oval shape, slightly pyriform, one end more rounded than the other, and have an average length of about 2·10 inches, and a breadth at the largest portion of 1·90 inches."

Dr. E. Coues says the eggs of this species vary in measurement "from 1·90 by 1·40 to 2·12 by 1·33, averaging about 2·00 by 1·45." †

† 'Birds of the North-West,' p. 512.
NOTES
ON THE
BIRDS OF NORTHAMPTONSHIRE
AND NEIGHBOURHOOD.

BY

LORD LILFORD,

PRESIDENT OF THE BRITISH ORNITHOLOGISTS' UNION AND OF THE
NORTHAMPTONSHIRE NATURAL HISTORY SOCIETY.

. ILLUSTRATED

BY

Messrs. A. THORBURN and G. E. LODGE.

WITH A MAP OF NORTHAMPTONSHIRE.

"Lord Lilford's keen interest in birds is well known, and his magnificent illustrated work on
the subject is the delight of all bird-lovers. These two handsome volumes of 'Notes on the Birds
of Northamptonshire and Neighbourhood' consist for the most part of papers contributed by Lord
Lilford from time to time to the 'Journal of the Northamptonshire Natural History Society.' But
the notes and observations are by no means confined to Northamptonshire and its neighbourhood.
Lord Lilford has travelled much and carried his love of birds, and his habit of observing them,
wherever he went. 'I must,' he says, 'explain my frequent reference to various parts of the world
by stating that in the early years of our society's existence we had not any member but myself who
had devoted any special attention to Ornithology, and I therefore thought it well to tell all that I
knew from personal experience of the birds I had to treat.' Thus, though Northamptonshire and its
immediate neighbourhood nominally supplies the local limitations of the book, its real boundaries are
those of Lord Lilford's travels and personal observation, and every bird which can be connected,
however remotely, with Northamptonshire is described not merely in reference to that particular
habitat, but from the fulness of Lord Lilford's knowledge. 'I have no pretence,' he says, surely with
undue modesty, 'to the title of scientific ornithologist, but I have been a lover of birds from my earliest
years, and a close observer of their habits, till debarred from such observation by physical infirmity.
Lord Lilford's observations are not, it is true, scientific or systematic; but no lover of birds will
appreciate them the less for that, or fail to recognize in their spirit and method that kinship with
Gilbert White which to those who share it is an irresistible bond of sympathy. The work is copiously
and very effectively illustrated by Messrs. A. Thorburn and G. E. Lodge, and should command a ready
welcome far beyond the limits of Northamptonshire."—Times, Jan. 11, 1896.

LONDON:
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"Mr. Poynting's egg-pictures are by far the best since Hewitson."—Lord Lilford (President of the British Ornithologists' Union).

"Mr. Poynting's plates are, without exception, the very best of any that have hitherto been published here or on the Continent on oology, and I most sincerely wish him success, and trust that he may continue the work until he has made it a complete work on British Oology."—H. E. Dresser (Author of the 'Birds of Europe,' &c., &c.).

"Can appreciate the great success in these beautiful figures."—(Rev.) Murray A. Mathew (part Author of the 'Birds of Devon' and Author of the 'Birds of Pembrokeshire').

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"I am charmed with what you sent me this morning; the accuracy, detail, and elaborate finish of this latest addition to British Oology places it beyond the pale of even a breath of adverse criticism."—H. S. Davenport.

"I think the plates are splendid."—F. H. Barclay.

"The finest illustrations of eggs I have yet seen."—A. Macomb Chance.

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"I write to you now to ask if you do not see your way to extend your work so that it should embrace the whole of the British Birds according to Howard Saunders. It would then be a fit companion to Mr. Dresser's 'Birds' and would stand, as the latter work does, at the top of the tree. The illustrations are quite the best ever produced, and even in these days, when photography in the dark is a fait accompli, and photography in colours may be within measurable distance, it is difficult to imagine that your drawings of eggs will besurpassed. The letterpress is also admirable, and I do not think could be improved. I hope, therefore, that you will continue your work."—W. Newall.
EGGS OF BRITISH BIRDS.

LIMICOLÆ.
(PLOVERS, SNIPES, SANDPIPERS, &c.).

BY
FRANK POYNTING.

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LONDON:
R. H. PORTER, 7 PRINCES STREET, CAVENDISH SQUARE, W.

Price £1. 5s. net.
STONE-CURLEW.
(Edicnemaus scolepa (S. O. Temminck).
STONE-CURLEW.

ŒDICNMIDÆ.

ŒDICNEMUS SCOLOPAX (S. G. Gmelin).

EXPLANATION OF PLATE.

Figure 1. Suffolk, May 1891.
,, 4. Brandon, Suffolk, May 1891.
,, 5.
,, 6.
,, 7. Fuerteventura, Canary Islands, February and March 1891.
,, 8.
,, 9.
,, 10.
,, 11. Norfolk, May 2, 1884.

The Stone-Curlew is a summer visitor to England, breeding on heaths and downs in some of the eastern and southern counties, while a limited number pass the winter in the south. In Scotland and Ireland it is only an accidental visitor.

In an interesting article "On the habits of the Stone-Curlew," Mr. F. Menteith Ogilvie writes *:— "The bird arrives here early in May, and leaves late in September. Like most of the later migrants, I think, it nests within a short time of its arrival. The nest is a mere hollow scraped in the bare peaty or sandy earth, in which the two eggs are deposited. The eggs are beautifully protective in colour, and extremely difficult for an inexperienced person to find, though they lie, large and boldly-marked, on the bare earth. The earth on which the eggs are laid is generally brown at first, but, as incubation proceeds, the rain and the sun gradually transform this brown colour into a dull grey, by washing the brown earth and leaving the sandy particles on the top. This is a point which, I think, may be of some small service to the birds, for the darker colour seems more


MAY 16 1914
2d
protective for the eggs and the lighter tint for the nestlings. The Stone-Curlew generally makes its scanty nest in the middle of a bare field or moorland waste, so that it is quite impossible to approach without the bird seeing the intruder, and she always steals quietly away at the earliest threatening of danger, leaving her eggs to take care of themselves, and well aware of the danger of remaining by them. I have never heard the Stone-Curlew utter any note during the daytime, whether disturbed from the nest or merely flushed by chance, but after sundown they become very noisy, and their weird cries may be heard throughout the night, ceasing only as the morning begins to dawn. The local name in this district is 'Shrillk Owl' (from the cry, of course), and the name is appropriate. This cry is generally described as a whistle, even a 'melodious' whistle; possibly this is the best description of it, but I always think it wants some epithet added to it, such as 'weird' or 'ghostly.' Their wild cries, ringing out loud and clear on a still night, always suggest something uncanny.

"I had this year an excellent opportunity of watching a pair of these birds which laid in their usually exposed situation on the common, but within about seventy yards of a large gorse-bush. I constantly tried to observe them by stalking behind this bush, but always failed, till at last the idea occurred to me of walking boldly up, disturbing them, and then laying up in the gorse-bush. This proved successful. After waiting about half an hour, I had the pleasure of seeing the female bird steal up to the nest and settle on the eggs. The male bird appeared at the same time, and stood on a raised knoll at some distance from the nest, evidently on sentry duty, and watching for danger from every quarter.

"While I was looking at them, I unfortunately broke a small twig of gorse, in trying to shift myself into a more comfortable position. In a moment I was detected: both birds turned their heads sharply in my direction; the male disappeared over the side of the knoll; the female raised herself off the eggs, and stole away, with head lowered and neck extended, at a fast crouching kind of run, and though I waited another half an hour, nothing would induce them to return, but I occasionally caught a glimpse of the head of the male just showing over the top of the knoll, and evidently prospecting to see if the ground was clear. Not wanting to disturb the birds, I left my biding-place, but I never had another opportunity of watching them, for they would not again approach the nest without first carefully scanning the gorse-bush, and making sure that no one was concealed there. I watched these eggs hatching, and noticed an interesting fact connected therewith that I think deserves recording.

"Both eggs were sprung on the 31st May: on the morning of June 1st, the
eggs had two little holes in them, and the beaks of the nestlings were showing inside; at 6 p.m. on that day the first bird hatched, and at that hour was half out of the shell, and still wet, the egg having evidently only just broken; at 8 p.m. I again examined the nest, and found the first bird quite dry, and the still remaining egg not yet broken, though clearly on the point of doing so. But the egg-shell which I had seen in the nest at 6 p.m. was now nowhere to be seen. This was unquestionably removed by the parent birds as soon as the young one was hatched and clear of the egg, and must have been done immediately after my visit at 6 p.m.

"The young birds and the eggs are both protective in colour; but a broken egg-shell, with the remains of membranes and blood-vessels inside, is by no means so. In fact, it is a kind of sign-post pointing out the whereabouts of the nest to all comers. No one passing the nest could fail to see the broken egg-shell lying on the ground, and a Stoat or a Rook would observe it even more readily.

"Young Thick-knees are able to leave the nest at a very early period; but I doubt if this period is ever less than twelve hours, and in the case of an egg remaining unhatched for some hours after the other (as happened here), the danger of leaving the egg-shell would be very great."

Mr. A. Trevor-Battye watched, under more favourable conditions, a pair of Stone-Curlews nesting on a sandhill near the Norfolk coast. He has published the following graphic account of his experiences*:—"Over there, where the sandhills are planted with various kinds of pine, a pair of Thick-knee or Norfolk Plover nested this year, for the first time on record. This bird, quite apart from its own very quaint appearance and habits, must always have a great interest for British ornithologists, as it is the nearest surviving link we have with the Great Bustard, now, alas! extinct in this country. It is nocturnal in its habits, and is extremely wary and shy. Although on its arrival in spring it keeps well away in the open, it generally lays its eggs not far from a covert or belt of trees. The pair of which I speak had chosen the middle of a gravelly space among the pines. By creeping up on hands and knees under cover of a bank one could gain a position, just fifteen paces away from the nest, without being observed: so close that with my glass I could see the light shine through the crystal prominence of the sitting bird's great yellow eyes. At intervals one bird would relieve the other on the nest. When disturbed the birds always ran for shelter to a bank beneath the pines. And here the bird that was not sitting always stood as sentry. When

its turn came to relieve its mate it would walk pretty deliberately across the first part of the open, where it was more or less screened by a fringe of trees; and there, having reached a point that was commanded from a long way off, it would suddenly lower its head and run as fast as a Red-leg to the nest. When it was about a yard away the sitting bird would slip off and, staying for no greetings, run past and away to the pine-bank. Though I watched these birds for many hours on several days, I never but once saw any change in this procedure. It was interesting to notice that the bird always rose backwards off the eggs, so that its long legs should not disturb the eggs; and that the newcomer did not turn the eggs immediately, but squatted perfectly still for perhaps a minute, as if to make sure it was not observed. And after the eggs were satisfactorily bestowed, and all the coast seemed clear, the bird would close its eyes in the hot sunshine and appear to go to sleep. But even then I could scarce move so much as a finger above the grasses, but instantly it was off its nest and away.

"I never but once heard these birds make their well-known night-call, and that was in the daytime, and before they had fairly begun to sit. But they often make another little noise—a short, clear note of warning. And so I tried experiments, crawling round to another point from which the nest was out of sight, but from which I could see the sentry bird standing at its post. Then I could make never so slight a movement but with that the watcher gave his quiet piping call, the first sound of which sufficed to lure the sitting bird away.

"And as they stood together on the bank, it was curious to see the different behaviour of the two. For the bird whose turn it was to sit was all anxiety; walking irresolutely a few feet or so and back, ruffling its feathers, looking eagerly out in the direction of the nest, evidently unable to shake itself together for the passage of that open ground. But the other took a different line; standing still and preening its feathers, and giving its partner a dab of the beak from time to time, as if to say 'Hurry up, now; what a nervous fidget you are! Those our two eggs will be getting quite cold.'"

The late Mr. H. Seebohm has given an interesting account of a visit made by him, in company with Mr. E. Bidwell, to the breeding-grounds of the Stone-Curlew on Black Heath, near Ipswich, on May 21st, 1881. The great heath where these birds had bred from time immemorial was fast becoming reclaimed, and only few of the wilder parts remained, consisting of patches of hilly and broken ground covered with heath, with occasional clumps of furze bushes. Describing the discovery of two clutches of eggs, he writes *:—"We walked on until we came to the brow

* 'History of British Birds,' vol. ii. pp. 598, 599.
of the hill, where we saw a Stone-Curlew rise from the ground about seventy yards ahead of us. We marked the spot; but before we had quite reached it, we found the two eggs on a place where the heath was short. As before, it was a mere hollow scratched in the bare black peat; not even a bit of grass had drifted in to serve as an apology for a lining. The two eggs were very different, both in size, shape, and markings, and no one would have suspected them to form a clutch; they were on the point of hatching, both eggs were chipped, and we could hear the young chirping inside. But for all that, the female flew right away, without any attempt to lure us from the spot, and though we stayed near the nest some time, we saw no more of her.

"The Stone-Curlew is a very conspicuous bird on the wing, the light and dark markings on the secondaries being specially conspicuous during flight. It is also easily seen on the heath, even at a great distance, being so much paler and yellower than the prevailing colours of the grass, heath, and peat; as the season advances these naturally become burnt up or parched, and then the Stone-Curlew is much less conspicuous.

"A little further on a third bird rose from the ground, and was shortly joined by her mate; both flew right away. We had no difficulty in finding the eggs. The bird runs about fifteen to twenty yards and then takes wing. These two eggs were similar in size and shape, but very different in style of coloration. As before, there was nothing but a slight hollow scratched in the black peat. Although the eggs are very conspicuous, and there is obviously no attempt at concealment, their very conspicuousness assists in their concealment. In the localities chosen for depositing its eggs, the Stone-Curlew selects a place where the heath is short. Where we found them brown stones and white flints were lying in all directions, and were far more conspicuous than the eggs; it was only when we began to look out for double stones that we found how easy it was to discover the eggs. The sitting bird seems to rely upon its powers of observation to escape enemies, and chooses a situation where it can see all round, regardless of whether it can be seen or not. We did not hear the birds utter any note, except a distant plaintive cry, like the wail of the Golden Plover. The actions of the birds at the nest are, however, most un-plover-like, and in its habits this species certainly resembles the Bustards."

Mr. Seebolm continues *:—"The eggs of the Stone-Curlew (two in number) vary from pale buffish or creamy white to rich clay-buff in ground-colour, spotted, blotched, and streaked with light and dark brown, and with underlying markings

* Tom. cit. pp. 599, 600.
of lilac or grey. The eggs vary in length from 2·2 to 2·0 inch, and in breadth from 1·6 to 1·49 inch.

"Both birds assist in the duties of incubation. Only one brood is reared in the year; but if the first eggs are destroyed others will be laid, and fresh eggs have been obtained as late as September."

Mr. H. E. Dresser states that the measurements of eggs of this species in his collection vary from 2·0 by 1·47 inch to 2·1 by 1·5 inch, and 2·25 by 1·47 inch.*

Dr. R. Bowdler Sharpe states the following to be the measurements of the eggs of this bird:—"Axis, 1·9-2·4 inches; diam., 1·45-1·6."†

* 'History of the Birds of Europe,' vol. vii. p. 496.
† 'Handbook to the Birds of Great Britain,' vol. iii. p. 130.
PRATINCOLE.
Glareola pratincola (Linnaeus).

F. Foynung del
COMMON PRATINCOLE.

GLAREOLA PRATINCOLA (LINNÆUS).

Explanation of Plate.

Figure 1. South Russia, May 27, 1889. In collection of H. Massey, Esq.
" 5. South Russia, May 1, 1890. In collection of F. Poynting.
" 8. South Russia, May 6, 1890. In collection of F. Poynting.

The Common Pratincole is an accidental visitor to the British Islands, about twenty occurrences, mostly in England, having been recorded.

Mr. Howard Saunders describes the geographical distribution of this species as follows *:—"Early in April the Pratincole returns from its winter-quarters in the south to North Africa, where large numbers remain to breed; while others pass through Egypt and nest in Palestine, Asia Minor, the Dobrudschia, the neighbourhood of Missolonghi in Greece, Sicily, the Balearic Islands, and the plains at the mouth of the Guadalquivir in Spain. In other parts of the Mediterranean basin it is chiefly known as a migrant, though some may remain on the west coast of Italy, along which the 'Pernice di mare' is well known on passage. It continues its course to the Camargue in the south of France, where again it finds suitable breeding-ground; a few ascending the valley of the Rhone to Savoy, and spreading out over the central, western and northern districts of France as far as the mouth of the Somme. In Belgium, Holland, Denmark, and Germany —according to the latest authorities—it is not known, the mountain ranges of Central Europe forming, apparently, a barrier which it does not cross; and, though found in Austro-Hungary, it is very rare in Poland; while in Southern Russia and on the eastern side of the Black Sea the representative form is

* 'Manual of British Birds,' pp. 517, 518.
GLAREOLIDÆ.

G. melanoptera, which has black—instead of chestnut—under wing-coverts and axillaries, with no white alar bar. Both of these forms (as well as one that is intermediate) are found in Asia, especially on salt-plains, as far east as the Tian-Shan range; and both occur in South Africa down to Natal in the cold season. There are several other members of the family in the Ethiopian, Indian, and East Australian regions, but none are known in the New World.

Mr. O. Salvin, who met with the Pratincole during a tour through the Regency of Tunis and Eastern Algeria, from February to July 1857, writes *:—

"The Pratincole was found in the table-lands of the interior, frequenting the salt lakes and freshwater marshes. Its fearless manner and familiar habits cause it to rank high among the interesting birds of the country; and I remember few that I have watched with greater pleasure. When in proximity to their nests, the whole flock come wheeling and screaming round, while some dart passionately down to within a few feet of the intruder's head, retiring again to make another descent. When the first transports of excitement are over, they all alight one by one on the ground. Some stand quite still, watching with inquiring gaze; while others stretch themselves out, first expanding one wing, then the other, and sitting down extend both legs. In this position they remain some seconds as if dead, when, suddenly springing up, they make another circuit over head, and the whole flock passes quietly away. The bird makes no nest, but deposits its three eggs in a slight depression of the bare sand. The eggs are usually placed with their axes parallel. We several times visited places where numbers of these birds were breeding; yet we never succeeded in finding a young one, though many of the eggs were on the point of being hatched. This fact certainly favours the idea that on leaving the egg the young are capable of running like those of other Grallæ."

The late Mr. H. Seebohm gives the following account of the breeding habits of this species †:—"I found the Pratincole breeding in considerable numbers on the islands in the lagoons of Missolonghi in 1873, and in a precisely similar locality a little to the north of the entrance to the Gulf of Smyrna in 1872. In the former locality I found plenty of fresh eggs in the last week of May; and in the latter most of the eggs were almost ready to hatch in the second week of June. At Missolonghi the birds were wild, flying round us uttering their peculiar cry before we landed on the islands. In Asia Minor, on the other hand, they were evidently sitting hard, and allowed us to land and approach them before they left their nests. They then evidently attempted to lure us away from their treasures

† 'History of British Birds,' vol. iii. pp. 71, 72.
by feigning lameness, standing with drooping wings, or running along the ground as if unable to fly. When once upon the wing their flight was rapid and powerful, like that of a Tern. They are not, strictly speaking, gregarious in their habits. We never found anything like a colony of them upon any one island. We rarely visited any of the numerous islands without finding at least one pair of birds upon it, and perhaps none of the islands contained more than half a dozen pairs, and they were scattered about at a distance from one another. They do not make any nest, but lay their eggs upon the bare ground, seldom, if ever, taking the trouble to scratch a hollow or to collect what dry grass or seaweed may be at hand. They seem studiously to avoid coarse grass or rank herbage, and prefer to lay their eggs on the dried mud, sheltered only by the straggling plants of Salsola, which grow all over the lowest and wettest parts of the islands. The number of eggs was usually two, occasionally three, and only in one instance four; probably the latter clutch was the production of two females.

"The eggs of the Pratincole are very fragile, oval in form, being scarcely more pointed at one end than the other. They vary in ground-colour from citron or yellow-ochre to pale slate, richly spotted all over with streaks and blotches of dark brown, approaching black, in some instances most so at the larger end. The underlying spots of pale greyish brown are usually very distinct, and often impart great beauty to the egg, giving it a marbled appearance. They vary in length from 1·35 to 1·1 inch, and in breadth from 1·0 to 0·9 inch. It is scarcely possible to confuse the eggs of the Pratincole with those of any other British bird."

Messrs. A. Chapman and W. J. Buck found this species breeding in the marisma of the Lower Guadalquivir. They write* :—"May 11th.—The Pratincoles are now beginning to lay—one or two eggs in each nest; but subsequently we got them in baskets full. Some of these eggs when freshly-laid have a beautiful purplish gloss. Three is their complement, and they hardly make any nest, merely a few broken chips of shells."

* 'Wild Spain' (London: Gurney & Jackson, 1893), pp. 91, 92.
CASPIAN PLOVER.
Charadrius asiaticus, Pallas.
CASPIAN PLOVER.
CHARADRIUS ASIATICUS, PALLAS.

Explanation of Plate.

An example of this Asiatic species was shot in Norfolk on May 22nd, 1890, this being the only British record.

Prof. M. Menzbier, of Moscow University, has kindly supplied me with some valuable notes on this species, which I translate as follows:—"The breeding-area of the Caspian Plover extends from the mouth of the Volga eastward over the lower courses of the rivers Ural and Emba, and stretches along the eastern shores of the Caspian Sea; from here it extends to the Sea of Aral, to the salt lakes of Turkestan, and to the south as far as Amu-Darja. It only occurs as a straggler near Astrachan, where Henke shot a pair of these Plovers flying with a flock of Pratincoles in the spring of 1871. It breeds regularly around Gurjew. Severtzoff observed it in the Issenj-Berdy district on the lower course of the Emba. Zarudny found this species in the neighbourhood of Kos-Kulj, on the river Issembaj, in the Bisch-Tomak district, and on the Ilék, in the Kara-Turgaj district. At Orenburg, however, he did not meet with it even on passage. Owing to its sporadic distribution the Caspian Plover does not nest every year in the same districts, and only occurs occasionally even in those regions where it breeds regularly. It has been observed on passage in large numbers at Lenkoran, occasionally at the mouth of the Terek, and on the south-eastern shore of the Caspian Sea. It has been obtained below Odessa in the spring. From the southern shore of the Caspian Sea the lines of migration of this species intersect Arabia and extend to the region of the Upper Nile; and from here its winter-quarters extend to the southern half of Africa.

"Details respecting the life-history of the Caspian Plover are very meagre. It inhabits waste regions with a salty or dry clayey soil, covered with tall thin wormwood and other scanty herbage. It also frequents low-lying steppes, having a clayey soil and almost devoid of vegetation. The Caspian Plover arrives on the
north shore of the Caspian Sea in the beginning of April, and immediately chooses
tits nesting-place. At this time it keeps in colonies of about ten pairs, which
usually have their nests round the shores of some salt lake. The male birds sport
in the air, now soaring upwards, now swooping down with a curious, though not
unpleasing cry, consisting of three notes. The females then only fly off when
they are pursued and are usually much more wary than the males. The nest
consists of a shallow depression, with scarcely any lining, and in this the clutch
of three eggs is laid. Their ground-colour is ochraceous, thickly sprinkled with
irregular blackish-brown spots. Their form is oval and they measure 1·45 inch
in length by 1·02 inch in breadth. The food of the Caspian Plover consists
of coleoptera and cicadæ. It departs for its winter resorts in the middle of
August."
GREY PLOVER.

Squatarola helvetica (Iwnurus).

Litho Wilhelm Greve Berlin
GREY FLOVER.
Squatarola helvetica (Linnaeus).
GREY PLOVER.

SQUATAROLA HELVETICA (LINNAEUS).

EXPLANATION OF PLATES.

Figure 1. No. 11196.
   2. " 11199.          Franklin Bay, Arctic America; R. MacFarlane
   4. Petchora, lat. 68° N., June & July 1875; Seebohm and Harvie-Brown coll.
   5. Natural History Museum, South Kensington.
   7. July 7, 1895; C. E. Pearson coll.
  10. " 11, 1895;

The Grey Plover is a spring and autumn migrant to the British Islands, numbers remaining through the winter.

Describing the geographical distribution of this species, the late Mr. H. Seebohm writes *:—“The Grey Plover is a circumpolar bird, but has only been known to breed on the tundras above the limit of forest-growth. It appears to be very local in its distribution during the breeding-season. It is not known with certainty to breed anywhere except in the lower valley of the Petchora, on the Taimyr peninsula in the extreme north of Siberia, in Alaska, on the banks of the Anderson River, and on Melville Peninsula†. It passes through Central and Southern Europe on migration, and winters in the basin of the Mediterranean and in Africa north of the equator. The eastern birds pass through South Siberia, Turkestan, Mongolia, and Japan on migration, and winter in India, South China, the islands of the Malay archipelago, and Australia. In the New World its range has not been so accurately determined, but it is known to winter in the West Indies and in several parts of South America.”

The eggs of the Grey Plover were first discovered by Middendorff in 1843 on

* ‘History of British Birds,’ vol. iii. pp. 44, 45.
† [Since this was written eggs have also been obtained on Kolguev and on the River Yenisei.—F. P.]
CHARADRIIDE.

the Taimyr peninsula, in Siberia. An account of his discovery will be found in his 'Sibirische Reise' (1853, Band ii. p. 209). He describes the nests as formed of dry leaves and grasses, and says the female birds were sitting on their four eggs on June 26th.

Mr. R. MacFarlane, who obtained eggs of the Grey Plover on the Arctic coast of North America, writes as follows *:—“Our first introduction to this handsome and somewhat rare Arctic plover was on Island Point, in Franklin Bay, on 4th July 1864. The nest contained four eggs and was composed of a small quantity of withered grasses placed in a depression on the side or face of a very gentle eminence. Both parents were seen and the male shot. We at first mistook them for the Golden Plover, which they so much resemble, but their note and a close comparison of skins soon undeceived us. On the following day another nest with four eggs was discovered, and a third also was met with, over which a snare was set; but, unfortunately, while we slept, a Snowy Owl (Nyctea nyctea, Linn.) devoured the captured female, together with her four eggs. In 1865, seven nests were gathered by our party in the same quarter. It is probable that both parents relieve each other during the process of incubation, as a male bird was snared on one of the nests. We never received a single skin or egg of this, but plenty of the Golden Plover, from the Esquimaux of the Lower Anderson or from the shores of Liverpool Bay.”

Messrs. Seebohm and Harvie-Brown succeeded in obtaining eggs of the Grey Plover in the valley of the Petchora, in Siberia, in 1875. They found ten nests containing eggs between June 22nd and July 12th, and obtained specimens of the young in down. Mr. Seebohm’s graphic account of their discoveries, which appeared in his ‘Siberia in Europe’ and ‘History of British Birds’ and in other works, is so well known that it is unnecessary to reproduce it here. The nests were found on the tundra, and were usually placed on the dry tussocky ridges intersecting the bogs. One described was “a hollow, evidently scratched, perfectly round, somewhat deep, and containing a handful of broken slender twigs and reindeer-moss.” Owing to the wariness of the birds, the discovery of the nests was at first a difficult matter, but after some practice this became easier. It was necessary to distinguish carefully between the male and the female bird, and to watch the latter on to the nest. As far as was observed only the female attended to incubation.

Mr. A. Trevor-Battye, who found the Grey Plover nesting on Kolguev Island in 1894, writes as follows †:—“From the day of our first landing till about the

† ‘Ice-bound on Kolguev’ (Westminster: A. Constable & Co., 1895), pp. 431, 432.
end of the first week in September we almost daily saw the Grey Plover. The first nest I found was on June 26 on a high down about halfway across the island. Here I took a Grey Plover’s nest of four eggs and shot the female. The male of this species is exceedingly wary and wild. They very seldom venture within shot. After waiting about for a long time and sending Hyland round also with his gun, I had to give it up. There is no possibility of confusing this with the Golden Plover, even when on the wing. The call is quite different, and I think the flight more powerful, and that is saying a good deal. The skuas stood no chance with them. They actually seemed to both of us to hit the skuas, wheeling round them and then, making a point high above, they would drop down like a stone, literally knocking the skuas out of time. The nest was a deep circular depression, and contained nothing but the eggs and a little lichen.

“In another nest on July 13 the eggs contained fully formed young ones. From August 10 onwards there were immense flocks of these birds constantly wheeling over the mud-flats. These birds behave very differently at different times when nesting. Sometimes the hen-bird feigns lameness, though I never saw the male do this. Often, however, their actions exactly recall those of the stone-curlew, excepting that we never found a male brooding the eggs. The male bird, who always sits on some raised point at a little distance from the hen, gives, long before you come up, an alarm signal to the hen, whereupon she runs off the nest and joins him. The breasts of the males we shot were all equally black, but those of the females varied a great deal.”

In the following year (July 1895) Messrs. H. J. and C. E. Pearson also obtained eggs of the Grey Plover on Kolguev. Mr. H. J. Pearson’s notes on this species are as follows*;—“The discovery of these eggs has been so well described by Seebohm and Harvie-Brown in their paper in the ‘Ibis,’ that we have little to add. We feel sure, however, that our brother ornithologists will sympathize with our glow of pleasure and even our wild war-dance on finding our first nest containing a clutch of four beautiful eggs. And, indeed, both glow and dance were needed, for few things are more calculated to chill enthusiasm and unpleasantly lower one’s temperature than watching, for 50 minutes in a piercing wind and sleet, even a Grey Plover to its nest. We took in all seven clutches of eggs (four, four, four, four, one, and three respectively). The first two were fairly fresh. In the third and fourth the chicks were calling and their beaks partly protruded through the shell. The fifth contained young in down, but not quite so advanced. The egg in the sixth was nearly hatched, and the three young birds from the other eggs were caught about the nest. In the seventh two eggs were added, one nearly hatched, and one young in down caught near. A few more young were also

* “List of Birds observed on Kolguev (July 5th to 15th [1895]),” ‘Ibis,’ 1896, pp. 216, 217.
secured. The positions of the nests were interesting: only two were on the lower ground near the Gobista; one was a mile both from the sea and the river; all the others—also several old nests—were on the tundra not far from the edge of the bluffs which form the margin of the river-basin. Grey Plovers seem to prefer this position, which gives them good posts of observation and allows them to take their young easily into the marshes below to feed. We found a ready way of locating the nest of this bird was to watch a pair of Richardson’s Skuas hunting over the tundra, for as soon as they approached the nest of the Plovers, both the latter rose in the air and drove the Skuas away. We never observed these birds breeding near each other, each pair appearing to take possession of about a mile of country. All the nests were slight depressions in the peat, lined with a little lichen.”

Mr. H. J. Pearson kindly lent me four representative varieties of these eggs to figure in the present work (Figures 7 to 10). He sends me the measurements of 15 eggs contained in four clutches of 4, 4, 3, and 4 eggs respectively. These vary from 2·12 to 1·87 inch in length, by 1·47 to 1·37 inch in breadth, averaging 2·01 by 1·42 inch.

I am informed by Mr. H. Leyborne Popham that last year (1895) he found the Grey Plover nesting on the Yenisei river in lat. 72° N., a locality which he believes has hitherto not been recorded. South of this latitude the bird was not observed.

The late Mr. H. Seebohm describes the eggs of this species as follows *:

“The eggs of the Grey Plover are four in number, intermediate in colour between those of the Golden Plover and the Lapwing, and subject to variation, some being much browner, and others more olive, none quite as olive as typical Lapwing’s eggs or as buff as typical ones of the Golden Plover, but the blotching is in every respect the same; the underlying spots are equally indistinct, the surface-spots are generally large, especially at the large end, but occasionally very small and scattered, and sometimes taking the form of thin streaks. They vary in length from 2·2 to 1·9 inch, and in breadth from 1·4 to 1·35 inch. Only one brood is reared in the year.”

Middendorff states that the measurements of the eggs he obtained on the Taimyr peninsula averaged 2·12 inch by 1·41 inch; the largest measuring 2·19 in length and the smallest 1·89 inch by 1·41 inch.†

The late Dr. T. M. Brewer gives the measurements of three sets (4, 4, and 3 eggs respectively), obtained by Mr. MacFarlane in Arctic America, as varying from 2·30 to 1·90 inch in length by 1·47 to 1·40 in breadth.‡

‡ ‘Water Birds of North America,’ vol. i. p. 137.
SOCIABLE PLOVER.
Vanellus gregarius (Pallas).

1 2 3 4 5 6 7
SOCIABLE PLOVER.

Vanellus gregarius (Pallas).

Explanation of Plate.

Figure 1. Astrakhan, April 10, 1888.

There is only a single British record of this species, an example having been shot in Lancashire about 1860.

Prof. M. Menzbier, of Moscow University, has favoured me with an account of the geographical distribution and habits of this species, which I translate as follows:—"The Sociable Plover is widely distributed on the steppes of Turkestan and South-west Siberia, as far east as Lake Saisan, and of European Russia. In the Perm Government it penetrates as far north as lat. 56¹/₂° N. in the Ekaterinburg district, but only nests in the south-eastern portion of the Government between the borders of the Schadrinsk district and Lake Tschebakul. Eversmann fixes the northern limit of this species between the Ural Mountains and the Volga at lat. 53° to 54° N., and says it is very common on the steppes between the Rivers Volga and Ural, around Samara, Busuluk, Orenburg, and Orsk, throughout the Kirghis Steppes, on the Ust-Urt Plateau, and on the Caspian and Aral Seas. It nests freely in the whole of the Orenburg region, though only occurring on the lower courses of the River Ural on spring and autumn migration. It is rare and does not breed at the mouth of the Volga, but nests freely on the River Sarpa. Further west, details respecting the nesting of this species are very meagre. Bogdanow saw a pair on June 30, 1870 (O.S.), near Gusselki, between the Rivers Nowlja and Medweditza. Zarudny says this species nests, though uncommonly, in
the valley of the River Ortschik. Kessler believes he met with it near Konstantinograd in May 1840. According to Nordmann it appears in large flocks in March on the shores of the Black Sea, and remains there till May without pairing. It probably nests on the steppes of the Crimea and the Kherson Government, and in the province of the Don Cossacks. As an instance of how far north this bird will wander it may be stated that Taczanowski saw a pair near Lublin in September 1842. On the steppes of the Stavropol Government it occurs frequently at the end of summer and in early autumn, rarely in spring, and is absent in the summer. On the spring passage it occurs occasionally on Lake Goktscha, and below Lenkoran, where it has been met with in December.

"The Sociable Plover appears to be a true inhabitant of the steppes and, as far as I am aware, cannot accommodate itself to other localities. The cultivation of the steppes must therefore sooner or later lead to the extermination of a very characteristic representative of their fauna. This bird has received its local name of Kretschetka from its grating cry 'kretsch, kretsch, kretsch,' which it repeats continually when assailing an intruder, or in seeking to lead him away from the nest. Although distinguished from the Lapwing both by the localities it frequents and by its habits, yet it resembles the latter in many respects, as, for example, in its form, size, peculiar flight, and swiftness in running. Viewed on the wing from a distance, the Sociable Plover, with its slow beats of the wing and upturned belly, might very well be taken for a Lapwing.

"The Sociable Plover arrives rather late, and not until black bare patches have appeared on the steppes, and the young grass has begun to spring up, which does not take place till the beginning of April on the Orenburg and Samara steppes. These birds, however, appear in March on the steppes lying north of the Black Sea, on their return from their African winter-quarters. Severtzoff observed them arrive from their Indian winter-resorts in the middle of March on the River Syr-Darja. The time occupied in passage is rather long, the latest individuals returning to their summer-quarters as late as the beginning of May. These Plovers arrive in small flocks, which very soon take possession of sites for their nesting colonies.

"Flat, monotonous, steppes, covered with heath, are avoided by these birds, and they only appear on the borders of such districts. The favourite localities for nesting colonies are hilly steppes with a clayey ground, not too thickly covered with heath, and with stretches of grass here and there, and bare, clayey patches; such a district being usually intersected by a river or lake. Here these birds
collect together before separating in pairs, and hold a sort of pairing-competition. The females being stationed as spectators round some bare patch of ground, the males rush forth in twos and threes, and engage in somewhat fierce combat, pulling at each other’s little head-feathers with their beaks, springing almost a yard from the ground, dealing blows with beaks, wings and feet, and uttering continually their rasping cries. Becoming exhausted, they retire with ruffled feathers, follow one another in a circle, and then recommence the fray. During this proceeding first one female and then another rises and begins to fly about the steppe, each being pursued by two to five males. After a short flight she sinks to the ground, followed by the males. The latter recommence the combat, till one of them remains the victor and pairs with the female, while the other males return to the fighting-ground. In this manner the birds gradually pair off, the competition ceases, and the period of nesting operations begins. The female chooses a small tuft of heather, under which she scratches a small hole, and lines it with dry grass. Here she lays four or five eggs, closely resembling those of the Lapwing. The male bird remains near the nest and shares the duties of incubation. The young are hatched out in two and a half to three weeks after the last egg has been deposited. Laying takes place from the middle of May onwards. The young broods, led by their parents, wander about over the steppe, feeding on cicadæ and coleoptera, and often join with broods of Pratincoles, with whom they live amicably, and make common cause against an approaching enemy. Zarudny, describing the assaults of the Sociable Plover, says: ‘They descry a man from afar, and use every means to lead him away. Flying low over the ground, with rapidly beating wings, they dash at him one after the other, uttering their broken, grating cries in measure with their wing-beats. When within a few feet of his face, they glance upwards with wonderful velocity, then with rapidly vibrating wings they turn round and swooping towards the ground in a semicircle, they dash furiously again at the intruder. This was their usual behaviour, as only in comparatively rare cases will the Sociable Plover attack a man from behind.’

“When the young are able to fly, the birds collect in immense flocks, each of some hundreds, and begin to lead a nomadic life, continually changing their feeding-grounds.

“When flying from one part of the steppe to another, these Plovers often rise to an immense height. When their hunger is satisfied, they repair to the water to drink, and here, like the Pratincoles, they spend some hours during the hottest part of the day. When the steppe is devoid of water, a flock will sometimes rest
on the ground after feeding. The sight of such a flock is very pretty, some of the birds squatting on the ground, some standing on one foot with puffed-out feathers, and others wandering up and down. The Sociable Plover, when not rendered shy, is trusting and bold; but after a few shots it quickly recognizes the danger threatening, and flies out of its reach. In the beginning of August this charming bird gradually begins its winter-flight, which is over by the end of September.

Dr. R. Bowdler Sharpe gives the following measurements for the eggs of this species:—"Axis, 1·65–1·95 inch; diam., 1·25–1·35."*  

GREAT SNIFE.
Gallinago major (J. F. Gmelin).
GREAT SNIPE.

SCOLOPACIDÆ.

GALLINAGO MAJOR (J. F. Gmelin).

EXPLANATION OF PLATE.

Figure 1.} Boel, Jutland, 1866; A. Benzon coll. In collection of H. E. Dresser, Esq.
" 2.} Boel, Jutland, 1866; A. Benzon coll. In collection of H. E. Dresser, Esq.
" 4.} Ditto. 1866; A. Benzon coll. In collection of H. E. Dresser, Esq.
" 5.} Ditto. 1866. In collection of E. Bidwell, Esq.
" 7. Boel, Jutland, June 25, 1877.
" 8. Boel, Jutland, June 25, 1877.
" 9. Russia, May 20, 1881.
" 10.} Boel, Jutland, June 1867. In collection of H. Massey, Esq.
" 11.} Boel, Jutland, June 1867. In collection of H. Massey, Esq.
" 12.} Boel, Jutland, June 1867. In collection of H. Massey, Esq.

This species is a regular autumn visitor in small numbers to England. Very few occurrences in Scotland or Ireland are recorded.

Mr. Howard Saunders describes the geographical distribution of the Great Snipe as follows*:—"In summer this species is found in the lowlands and also on the fells of Scandinavia up to about 70° N. lat., and breeds in Denmark—rather freely in Jutland, some parts of Northern Germany, and, sparingly, in Holland. In the marshy districts of Poland to the east of the Vistula, as well as in Russia down to about lat. 50°, it nests in considerable numbers, and Messrs. Seebolm and Harvie-Brown found it in abundance as far north as the delta of the Petchora. Over the rest of Europe it occurs on passage, though scarcely known in the west of France, and uncommon in Spain; but to the east of the Rhone valley we begin to find it equally frequent in spring and autumn, while it is distinctly more numerous on the vernal migration in Italy, Malta, and Albania. It occurs in North Africa from Morocco to Egypt, and passes southward to the Transvaal and Natal, arriving in September and October and departing for the north in April, in

* 'Manual of British Birds,' pp. 555, 556.
which month it has also been obtained in Damara-land on the west side. In Asia it has been found across Siberia as far as the Yenesei, and southward to the Tian-shan range, Turkestan, Persia, &c., but has not yet been recorded from India or China."

Messrs. F. and P. Godman found the Great Snipe breeding at Bodö, Norway, in 1857. They write*:—"On walking across the open part of the marsh, on the 26th of May, we flushed the first Great Snipe. This bird had evidently only just arrived, and did not fly more than a few yards before it settled again. Whenever else we observed this species, it was amongst the brushwood on the borders of the marsh. A few days after, as we were returning from a long ramble in the mountains, on pushing our way over some swampy ground covered with birchwood and dwarf-willow on the edge of the marsh, our attention was attracted by an unknown note of a bird on the ground, somewhat resembling the smack of the tongue repeated several times in succession. At first we thought it must be some animal; but, on remaining still for a few seconds, we saw several Great Snipes walking about and feeding within a few yards of us. We watched them for some time, but they did not appear to take the smallest notice of us.

"About the 10th of June we began to search for their nests; and though we could always find several birds, we did not succeed in finding any nests before June 24th, nearly a month after the birds arrived. About this time we found several places evidently scraped out by a bird as if for a nest, and as they were in a part of the marsh in which we observed no other bird except the Great Snipe which was likely to do this, although we were there almost daily for six weeks, and as they were invariably in exactly similar places to those in which we subsequently discovered the nests of the Great Snipe, we can attribute them to no other bird. Although we carefully looked at these scrapings several times subsequently, we never found any eggs in them; but on one occasion we took a nest with four eggs about 6 yards from one of these places.

"The first nest we found contained four eggs, and was placed on the edge of a small hillock, quite open, though there were dwarf birch-trees growing all round, and one on the very hillock on which the nest was situated. It consisted of nothing more than a hole scraped in the moss, in which the eggs were deposited; there were neither grass nor leaves in it. After a minute examination of it, and carefully marking the place, we went away to fetch our guns, the rain descending in such torrents that we were not carrying them that day. On our return in half an hour, the bird was again on the nest. We put it up and shot it. It

* "On the Birds observed at Bodö during the Spring and Summer of 1857," 'Ibis,' 1861, pp. 87–89.
proved to be a female. The eggs were very slightly incubated. The next day (June 25th) we found another nest within 200 yards of the former, containing only two eggs, and as we thought the bird would be sure to lay more, we marked the place and left it. It was situated on a small hillock, and much in the same sort of place as the former. We found another nest on the 27th of the same month. The bird fluttered off and ran away, dragging its wings on the ground, and making a sort of drumming noise. After taking four eggs from this nest, we returned to look at that found on the 25th, which contained two eggs. We walked directly to the spot, and what was our horror at seeing nothing in the place but some apparently disturbed moss! Our first impression was that the eggs had been destroyed by the Magpies or Crows that were constantly hunting for such food, or perhaps taken and eaten by one of the many boys who wandered about the marsh tending cattle; but on our beginning to express our fears, the bird, doubtless frightened by our voices, flew up, leaving a hole in the moss through which we could see there were still only two eggs as before. Not doubting, however, that the bird would yet lay more, we again left it, and returned in a couple of days. On approaching the spot, we observed the nest was again covered with moss. This time we remained for a minute before the bird flew off, and on stooping down to examine it more closely, we could distinctly see the bird's back through the moss. Not liking this close inspection, it flew up, and we took the eggs, which proved to be only within a day or two of hatching. The bird had evidently, after it was comfortably seated on its nest, torn up, with its long beak, the moss within its reach, and drawn it over its back till it was completely covered in the way described; there was not the least appearance of any hole through which the bird could have crept into its nest. This circumstance of the nest being covered is the more curious, as out of six we found, it was the only one thus carefully concealed. There were probably as many as ten or fifteen pairs of these birds in the marsh, which usually kept pretty close together, and were generally to be found in one particular spot. Could this have been a congregation of male birds, the mates of which were breeding in the vicinity?

"Mr Wolley obtained a nest with four eggs from this locality the same year, but unfortunately the eggs were much broken.

"We saw the bird occasionally on swamps in the mountains, but it would have been a hopeless task to have searched for its nest there, though we have little doubt it breeds in other localities in the neighbourhood.

"The down of a young bird of *Scolopax major* which we prepared and brought home is not nearly so dark as that of *S. gallinago.*"

Prof. Collett has given a full description of the peculiar habits of the Great
Snipe during the pairing season. The following is his account, taken from Mr. Dresser's 'Birds of Europe' *:—"During the pairing-season the habits of this bird are very peculiar; for it has a so-called 'Leg' or 'Spil,' like some of the Grouse tribe, a sort of meeting-place, where they collect to 'drum,' and often to engage in combat for the possession of the females; and in this respect it differs widely from its allies; for it does not indulge in aerial evolutions, but remains on the ground. Though its habits are so peculiar at this season, they are, comparatively speaking, seldom observed, as its note, or song as it may be called, is very low in tone. This also is the only time when individuals of the Double Snipe collect together in small numbers. The drumming-place (Spil-plads) is usually in some damp place in the marsh where there is water between the tussocks; and the number of pairs resorting to the same drumming-place is usually eight or ten, frequently less, and sometimes more. In a large morass at Fokstuen, in the Dovre, where many birds which frequent the fells breed, especially Totani, Triaga, and different Waterfowl, I have known the 'Spil' to consist of twenty pairs, and even more. Here the 'Spil' or drumming-season commences late in May, soon after the birds arrive, and lasts until the end of June, or until the females commence incubation. As soon as the dusk commences to set in, and whilst it is still tolerably light, the 'Spil' begins, and is continued throughout the night until the early morning. The male bird utters a soft, almost warbling note, which is accompanied by a peculiar snapping sound caused by striking the mandibles together several times in quick succession; and he then runs about in the grass in front of the females, jumps every now and again on a tussock, puffs out his feathers, and drops his wings. If a person approaches one of these drumming-places he can hear at some distance the low note bip, bip, bipbip, bipbiperere, biperere; and when within about a hundred paces, if the night is still, he begins to hear other peculiar sounds, which sometimes remind one of the distant cry of the Common Sandpiper, and sometimes of that of the Redshank, and intermingled with these a peculiar hissing or piping note which seems almost incomprehensible. On approaching closer, the snapping sound is heard clearly, and the other whistling notes seem to become a regular song in short stanzas with variations, some of which are exceedingly well executed. When uttering these notes the bird is usually perched on a tussock, from which it occasionally jumps down and ascends another in the immediate vicinity; but as a rule it sits for long immovable on the same place, never, like the Golden Plover, on the highest tussock or mound it can find, but

always on one of the smaller ones. Here it sits with the beak depressed without turning its head; and when the drumming commences it is begun by a whistling note or two; then comes the snapping note with five or six notes in rapid succession, and then a hissing sound, followed by a note resembling the word sbirrrr, which note becomes deeper as uttered. When the bird commences its note the head is stretched upwards, and is held thus until the snapping commences, after which it is depressed. Whilst producing these notes the bird is in ecstasy, and raises and spreads its tail like a fan, the outer tail-feathers showing in the half-darkness like two white patches. At a short distance the sound of the notes of the different birds at the drumming-place resembles a low continuous chorus, and is by no means unpleasant; for it may be compared to the song of the Willow-Wren whilst a strong wind is sighing amongst the branches of the forest-trees.

"As soon as a couple of males approach each other they commence to fight, slashing each other feebly with their wings; but the combat does not last long. Whilst drumming they are not shy, and may be approached to within a few paces before they fly up; and even then they settle down again directly, and after a minute or two recommence proceedings; nor does the report of a gun seem to occasion much alarm. They drum during rainy weather, but seem to prefer clear, bright nights. During the darkest portion of the night they break up the 'Spil,' to recommence operations as soon as it becomes a little lighter. It is curious that the bird should have the power of uttering a song or a succession of notes so well developed, when during the rest of the year it is nearly dumb; for it only utters a harsh alarm-note when suddenly flushed, and has no regular call-note.

"The eggs of the Double Snipe, which, like those of its allies, are four in number, are deposited in June. It makes no regular nest, but the eggs are laid on a few grass bents in a mere depression in the soil, close to a tussock or under a small bush; and the bird sits so close that it will not leave its eggs until nearly trodden on, and will then return to the nest directly the intruder has left its immediate vicinity. As soon as the young are hatched they can run, and at once leave the nest."

Mr. Howard Saunders gives the following description of the eggs of this species *.—"As a rule they are of a pale olive-grey or stone-buff with pale purplish underlyings blottches, and bold purplish-brown surface-markings, this colour being unmistakable and characteristic; but at times there is a greenish tint which renders it difficult to distinguish them from some eggs of Machetes pugnax, to

which species indeed most of the so-called Great Snipes' eggs taken in Holland should really be ascribed. They measure 1·8 by 1·2 in., being much larger than eggs of the Common Snipe, and very different in general appearance."

The late Mr. H. Seebohm states that the eggs of the Great Snipe "vary in length from 1·9 to 1·7 inch, and in breadth from 1·3 to 1·22 inch."*

* 'History of British Birds,' vol. iii. p. 239.
LITTLE STINT.

Tringa minuta, Lesson.
LITTLE STINT.
Tringa minuta, Linn.
LITTLE STINT.

TRINGA MINUTA, LEISLER.

EXPLANATION OF PLATES.

Figure 1.

2. Dvoinik River, on the Petchora, lat. 68° N., July 1875; Harvie-Brown and Seebohm coll. (Seebohm Collection). Natural History Museum, South Kensington.


The Little Stint is a regular spring and autumn migrant to the British Islands.

Mr. Howard Saunders writes as follows respecting the geographical distribution of the Little Stint*: — "On its autumnal migration this species visits the greater part of Europe, and, except on the west coast of France, it is almost as abundant on the spring passage. It does not appear to winter in any numbers on the northern side of the Mediterranean, though many remain in Morocco, Algeria and Egypt; but the majority make for the extreme south of Africa, the Seychelles, Arabia, and the entire Indian region, traversing, on their way to the latter, the great ranges of Central Asia. The breeding-grounds of the Little Stint were first discovered by Dr. von Middendorff, as far east as the Taimyr river in Asiatic Siberia, in lat. 74° N.; in the summer of 1872 Messrs. Alston and Harvie-Brown obtained a bird in nuptial dress at the mouth of the Dwina, while Prof. Collett

found the species common on the Porsanger-fjord in Norway, showing that its range extended further to the westward than had previously been supposed; and in July 1875 Messrs. Seebohm and Harvie-Brown were the first to take the eggs in Europe, near the mouth of the Petchora.* Nesting-places have since been discovered by Mr. Henke near Archangel, by Mr. E. Rae in the Kola Peninsula, by Prof. Collett in Northern Norway, and by Dr. O. Finsch near the Kam Gulf; while eggs were brought to Mr. Seebohm on the Yenesei †, thus connecting the chain from the westward with the Taimyr. Birds found on the Lena delta and further cast in Siberia have redder breasts in breeding-plumage, though undistinguishable in winter, and have been distinguished as *T. ruficollis.*

I translate the following account of Middendorff’s discovery of the nest and eggs of the Little Stint in 1843 on the Taimyr river in Siberia from his ‘Sibirische Reise’ ‡ :—“ On the 1st July I observed a female of this species running towards me with puffed-out feathers and with its head drawn towards its body. It was so eager in the defence of its nest, that I had time to take off my game-bag and throw it over the bird. Four eggs of a greenish colour spotted with brown lay in a depression in the moss on the swampy low-lying ground, and hardly twenty yards distant from a large pool. In the nest there were only dried willow-leaves as a foundation, and these had very likely been drifted together by the wind, and not collected by the bird. The eggs resemble those figured by Thienemann.” §

The history of the discovery of the eggs of the Little Stint by Messrs. Harvie-Brown and Seebohm in the Petchora in 1875 is so well known as to render its reproduction here unnecessary. Full details will be found in the late Mr. Seebohm’s own ornithological works and elsewhere. The nests were discovered on the *tundras* near the mouth of the Dvoinik River between July 22nd and 27th, and one described was a mere depression in the ground, lined with dead leaves and other dry material scraped together to form a lining. The eggs, usually four in number, were much incubated. As far as was observed incubation

* [Since this was written eggs have also been obtained on Kolguev.—F. P.]
† [Mr. H. Leyborne Popham informs me that last year (1895) he found the Little Stint nesting in lat. 72° N. on the Yenisei; the birds, which were numerous and tame, were not observed south of this.—F. P.]
‡ Band ii, Theil ii, p. 221.
§ [In ‘Nature’ of August 22nd, 1895, the late Mr. H. Seebohm stated that the eggs recorded by Middendorff as being those of the Little Stint were probably those of *T. ruficollis* or possibly those of *T. subminuta*. In the same periodical, under date September 5th, 1895, Prof. A. Newton confutes this statement, and uses convincing arguments to show that Middendorff was perfectly correct in recording the eggs as being those of the Little Stint.—F. P.]
was performed by the female only, whose tameness, when the nest was approached, was remarkable.

The late Mr. H. Seebohm has described the eggs as resembling in every respect miniature eggs of the Dunlin.

Prof. R. Collett has published full details of the nesting-habits of the Little Stint as observed by him in Northern Norway in 1880. I translate the following extract from his account *:—“I had again found Tr. minuta on the Porsangerfjord, in the summer of 1878, this time near Kistrand (where a female, shot on June 25th, contained an egg, the yolk being perfectly developed, which would have apparently been laid on the following day). At last I had the good fortune to find their nests and eggs in the summer of 1880 in the same locality.

“IT was partly with special regard to Tr. minuta and other East-European or Siberian birds that I again visited this district this summer in company with my friend Landmark, Inspector of Fisheries, previously mentioned. After the first nest of this species had been found, and by this means, almost accidentally, we were enabled to become acquainted with it and its ally Tr. temminckii, as well as with their characteristic behaviour at the nest, it was shown that there is hardly one among our other waders whose nests may be discovered as easily as those of these species, Phalaropus hyperboreus excepted, which has quite a similar character in this respect.

“This summer I found Tr. minuta again near Kistrand, and also in a new locality near Stabursnäs, a little lower down on the Porsangerfjord; the third locality, Tamso, where I had found it previously (1872), not being visited.

“It was not breeding in large numbers in any of these three localities; its breeding-stations here must be regarded as isolated and scattered, such as are found on the extreme boundaries of the breeding-district of a species. Without doubt the proper breeding-area of Tr. minuta lies further east than Europe. It always breeds in colonies associated with Tr. temminckii, the latter always largely preponderating.

“Whilst we saw, as already stated, 30 to 40 clutches of the last-named species, we only found three nests of Tr. minuta in spite of careful search. . . . . They chose for their nesting-places the same level plains, covered with heather or Empetrum, near the sea, as are frequented by Tr. temminckii, and both species nested amicably together. Only those plains, however, were chosen, on which at the same time small pools are found, preference being given to stagnant pools near the seashore with flat banks, these being sometimes covered with turf. These

* 'Journal für Ornithologie,' 1881, pp. 329-331.
little pools are necessary for these birds, as they find their food here, which consists of small diptera and their larva which inhabit them. They also seek food on the sea shore, though never as regularly as at the little fresh-water pools.

"The birds themselves revealed their nests to us in the same manner as stated in the case of Tr. temminckii. As soon as an individual was seen running by the pools or on the shore, we had only to watch it with particular attention till it had done feeding, after which it immediately flew directly to its nest, which was rarely more than a hundred yards away, but yet so concealed, that it would have been difficult or even impossible to discover it without the bird's assistance.

"What is here stated may, perhaps, serve as a hint to those naturalists who, in future expeditions, may find an opportunity of meeting with Tr. canutus and Tr. subarquata during their breeding-season. Indeed, I have no doubt that had Feilden adopted the same method when he was surrounded by breeding Tr. canutus in Grinell Land, in June and July 1876, he would have discovered the nests here also, with equal facility. If I had been acquainted with the behaviour of the Tringa genus at their nests when at Tamsö in the Porsangerfjord in 1872, I should not have had to search in the grass for hours for the nests of Tr. minuta, which I knew were there.

"The nests lay quite exposed among heather or sparse grass and were more carefully built than is the case with Tr. temminckii. One nest especially was ingeniously constructed of fine grass stalks, which formed a deep cavity for the eggs, and had not a little in common with the nest of Anthus cervinus, with which species Tr. minuta partly shared the locality. I watched the bird whilst it was in the act of building this nest; this was done amidst incessant twittering, and it is very likely that this was the male bird, although, as I learned subsequently, the female also utters the same notes.

"The number of the eggs was always four. On the whole their colouring agrees with those of Seebohm and Harvie-Brown, figured in the 'Ibis' for 1876 (pl. vii.). They are distinguished from those of Tr. temminckii by their constantly larger and violet-brown spots. Their ground-colour was also of a somewhat darker olive-brown than in those of the latter species, and the markings had a slight tendency to wind round the surface, as is the case with the eggs of the Gallinago family, Tr. striata, &c. . . . . . Both males and females have incubation-spots and both must therefore share the duties of incubation, though probably these fall chiefly on the male. At two of the three nests the sitting birds were shot and both proved to be males. On the other hand Seebohm remarks that he only noticed the female near the nest, and in his opinion the latter alone attends to incubation.
"In the case of Tr. minuta I observed no peculiar manoeuvres such as the male of Tr. temminckii shows at the breeding-season, in its remarkable aerial flights and strongly developed song. The male bird delivers his pretty twittering song whilst sitting on the ground, either immediately on or near the nest, but the female also possesses the same twittering song. After the male bird had been shot at one of the three nests, the female appeared, settled close to the empty nest, uttering a pretty twittering song quite similar to that of the male. In the stomachs of examples shot, I found minute fragments of insects mixed with sand. During the autumn migration, when they visit the southern parts of the country in flocks, I have found their stomachs also partly filled with the seeds of a shore plant."

Mr. A. Trevor-Battye has published the following details respecting his discovery of the eggs of the Little Stint on Kolguev in 1894*:

The little stint was by far the most abundant Wader on the island, and next numerically was the dunlin. On June 16 they were in small parties by the Kriva, chasing one another about, and none appeared to be nesting. On July 27 we found a nest with four eggs. It was a cup in the peat half-filled with dead leaves of creeping birch only. In the many nests I examined there were always dead leaves in the bottom of a cup—leaves generally of the creeping birch (Betula nana) or, according to the surroundings, of Vaccinium. Seldom had any other material been used. But a nest found on July 9 was 'a deep cup lined with dead birch leaves and a little dead grass.' We never in any instance saw more than one bird at the nest, or with the young. Out of seven birds secured under these circumstances, five were females, two were males. During the nesting-season and up to about the fifth week in August, parties of little stints numbering five, ten, or fifteen birds or so, might certainly be seen flying in and about the lakes. When flying in this way, these birds look very like larks, and make a twittering noise. No words could adequately convey a good idea of the complicated ruses adopted by this tiny wader near the nest: nor could one express phonetically the various notes it then utters. Thus: 'July 10, The little stint who had the nest made while feigning lameness &c. a noise exactly like the squeaking of a house-mouse.' 'July 12, Took one nest of little stint with four eggs. One bird only at the nest as usual—a male. It behaved, as H. said, like a dancing doll, jumping up and down on the same spot as if on springs.'"

Messrs. H. J. and C. E. Pearson also observed the Little Stint nesting on Kolguev in July 1895. Mr. H. J. Pearson gives the following interesting account

* 'Ice-bound on Kolguev' (Westminster: Constable & Co., 1895), pp. 434, 435.
of their experiences with this bird*:—"The eggs of this species were among the special prizes obtained on this island. The birds were fairly numerous on both sides of the river as far up as it was affected by the tide, but no nests were found beyond that point. The nests were in all kinds of positions: among coarse herbage on the low marshy ground, on dry ground at the foot of the bluffs, on the sides of the bluffs among dwarf sallow 3 to 5 inches high, and on the tundra among fine low grass some little distance from the edge of the bluffs. We took 15 clutches (12 of four, two of three, and one of one). . . . . Only two or three of the birds were shot for identification, for when a bird performs a little dance within two feet of you, or sits on your gun-barrel as it lies by your side to see how you blow the eggs, it seems not only unnecessary but cold-blooded murder, to kill it! It was quite bad enough to see one come and sit down in the nest close to your feet, and then get up to enquire where the eggs had gone. Some of the clutches were fresh, others taken some days earlier were too much incubated to make good specimens. In colouring, some eggs are beautifully blotched with burnt-sienna brown on pale green, and are like some varieties of Red-necked Phalarope, while others could scarcely be distinguished from eggs of Temminck's Stint—the latter form proving fatal to the bird! It is evident that great caution must be used in accepting the eggs of this bird as genuine."

Through Mr. H. J. Pearson's kindness I am enabled to figure eight representative varieties of these eggs (Figures 7 to 14). He sends me the measurements of 21 eggs, contained in 6 clutches of 4, 4, 4, 1, 4 and 4 eggs respectively. These vary from 1·17 to 1·04 inch in length, by 0·82 to 0·77 inch in breadth, averaging 1·11 by 0·80 inch.

The late Mr. H. Seebohm gives the measurements of eggs of this species as varying from 1·15 to 1·06 inch in length by 0·85 to 0·8 inch in breadth.†

Prof. R. Collett states that the measurements of the three clutches obtained by him on the Porsangerfjord varied from 1·22 to 1·10 inch in length by 0·82 to 0·80 in breadth.‡

* "List of Birds observed on Kolguev (July 5th to 15th [1895])," 'Ibis,' 1896, p. 218.
† 'History of British Birds,' vol. iii. p. 212.
‡ 'Journal für Ornithologie,' 1881, p. 331.
TEMMINCK'S STINT.
Tringa temminckii, LeSueur.
TEMMINCK'S STINT.

TRINGA TEMMINCKI, LEISLER.

Explanation of Plate.

Figure 1. Lapland, June 22, 1886.
   ,, 2. Ditto. June 12, 1890.
   ,, 4. Finland, June 15, 1890.
   ,, 5. Lapland, June 8, 1886.

Temminck's Stint is an irregular spring and autumn migrant to the British Islands, being much rarer in its visits than the Little Stint.

Mr. Howard Saunders describes the geographical distribution of this species as follows * :—"Temminck's Stint breeds in the northern districts of Norway, and in those parts of Sweden, Russia, and Siberia in Asia which lie beyond the limits of forest-growth; also, it is said, in the Stanowoi Mountains. Its reported occurrence in Japan is the result of an erroneous identification, but it visits China on its migrations—which extend to the Malay Archipelago—crosses the Central Asian tableland to India, and descends both sides of Africa to lat. 10° N. on the east side, and to Senegambia on the west. A considerable number, however, spend the winter in the Mediterranean basin, and on passage it is found on the shores as well as on many of the inland waters of Europe; it is, in fact, far more partial than the Little Stint to rivers, lakes and ponds."

Prof. Collett has published an excellent paper on the breeding-habits of Temminck's Stint as observed by him in Northern Norway in 1880, from which I translate the following extract † :—"In Finmark Tringa temminckii chiefly inhabits certain characteristic localities, where it is regularly to be found, and which one soon learns to recognize beforehand and to fix upon. It nests here always in larger or smaller colonies, seldom or never in single pairs. These localities are low-lying level plains covered with heath, Empetrum, or dwarf

† 'Journal für Ornithologie,' 1881, pp. 324–326.
willows, near river-mouths; on islands and deltas in the Fjord; near the sea-shore, and often quite close to inhabited places. But in order that this locality may afford a favourable breeding-place for this Stint (and Tringa minuta) it is a necessary condition that one or more flat and moist places or pools should be near at hand, where it can procure food, as, during the breeding time, it only seeks this exceptionally on the flat river-banks, or on the sea-shore. Such a locality once found, it was extremely easy for us to discover the nests. If a bird was seen in the vicinity on the feeding-grounds or not too far from them, we had only to remain very quiet and at a suitable distance from the bird, and in a few minutes it flew straight in the direction of the nest, then walked for the last two yards, and finally settled on it, while we could examine the bird through the field-glass, or often quite close to it. When it stayed too long at the feeding-place, we went straight to the spot and drove the bird up, when, in most cases, it flew directly to the nest. Even whilst the birds were on the feeding-ground, it was easy to decide which individuals were breeding or which were not; the former were extremely eager and restless in pursuit of food, and always in motion, whereas the latter fed more calmly, and at intervals remained quietly perched on a stone near the water for some time. Whilst the bird was sitting, it was possible to approach it gently within a few paces before it flew off, and for this reason a nest like this was, as a rule, only found by accident. If the bird was seen to fly up, it was easy enough to discover the nest, as it usually lay quite exposed.

"This summer we found altogether 30 to 40 nests, most of them in three localities, on each occasion during excursions of only a few hours.

"We found about twenty nests in a few hours, amongst a colony of about 30 pairs which were breeding on some moors on the lower-lying ground in front of the buildings of Stabursmaes (one of the stations). The reason that we searched so industriously for these nests was because there were some breeding pairs of Tr. minuta amongst these colonies, and after a little practice it was a much easier matter than is generally supposed to decide on the first examination with the glass whether an individual had a greyish-brown (Tr. temminckii) or reddish-brown (Tr. minuta) back. Most of the clutches found between June 27th and July 3rd were fresh or only slightly incubated; of these we only selected the fresh eggs for our collections and left the rest undisturbed. As on this occasion not a single sitting bird was shot at the nest, no observations were made as to which sex undertook incubation. But on four former occasions (Porsanger, 1872 and 1876) on which I shot the sitting bird as it left the nest and examined it, these were always males and had large incubation-spots. It is therefore very likely that the males principally undertake the duties of incubation."
"In most cases the nests lay quite exposed, either at the side of a single stone or a few smaller stones or amongst grass, or sometimes under a low willow-bush. Sometimes there was nothing in the desolate moor to indicate the position of the nest. At the bottom of the nest there was always a layer of dried leaves or some straw. The number of the eggs was without exception four, although we examined this year nearly 40 clutches, as above stated. They show comparatively small and unimportant variations.

"If the sitting bird was flushed from the nest its behaviour varied. Generally it flew quietly off and disappeared for a short time. In a few minutes it showed itself again near the nest and remained quiet for some time, when it allowed of an easy examination till it settled on the nest again. Sometimes, however, it feigned to be wounded, ran along the ground with plaintive cries and drooping wings and often perched on the highest twigs of bushes. This behaviour it nearly always showed if the eggs were much incubated or if it was flushed suddenly from the nest, whereas it did not resort to this artifice whenever it saw one approaching from some distance.

"If the eggs were much incubated and we did not leave the place, it generally displayed great anxiety, flying in circles over our heads for a long time, with a peculiar trilling note, tirrr, tirrr, tirrr.

"As is also the case with Tr. alpina, Tr. canutus (cf. Ibis, 1877, p. 407) and perhaps with most birds of this genus, the male bird exercises during the pairing and breeding-season very peculiar manœuvres. It will rise in the air singing and twittering, now flying in circles with quivering wings at a very little height, now remaining motionless in the air with rapid beats of the wing (just like Falco tinnunculus), and at last settling on a hedge, or on a large stone, or on the top of a bush, singing the whole time. Here it often continues its song, which somewhat resembles that of a warbler, raises its wings straight up, continues the whole manœuvres in the field, and is evidently in the highest ecstasy. The female is little seen during this time, but keeps herself more concealed. As soon as the process of laying is at an end, these manœuvres usually cease. A few birds continue them partially after the young are hatched, just as is the case with Scolopax rusticola &c. This I observed at Vadsö on the 20th and 21st July, 1878, in the case of some birds here and there still in full song, although the young in down were close at hand. The female, like Tr. minuta, possesses also the gift of song, and I have occasionally shot females uttering soft twittering notes whilst sitting on the ground.

"As stated above, most of the clutches were, from the 27th to the 30th June (Stabursnaes, Börselv), fresh or nearly fresh, but a little more incubated on July 3rd
at Kistrand. But as this summer was unusually late, and there were large masses of snow still lying on all declivities, the breeding-season is generally somewhat earlier in ordinary years. In 1874 at Tromsø I found fresh clutches on the 10th of June, and it can be taken as a rule that most eggs are laid about June 20th. The first young in down are to be seen in the first week in July, and the first young birds capable of flight towards the middle of July (Vadsø, July 19th, 1878). The stomachs of examples shot contained, in addition to sand, various insects which are usually found on the shore, as well as the larvae of *Diptera &c.*

In his notes on "A Birds'-nesting Ramble in Lapland" in the spring of 1884, Mr. A. C. Chapman writes as follows *:—"Coming down the Pulmakel, on our return to Pulmak, we found two nests of Temminck's Stints, one containing two eggs, the other three. The latter was placed close to a Lap's log-hut, and immediately behind a dunghill adjoining the house, a few paces from the edge of the Tana. The old birds were very solicitous, sailing around with their wings set over their backs, like a butterfly, often lighting on a tree, rail, or stone, or sometimes on the ridge of the Lap hut adjoining, uttering the while a continual pretty trilling note. I frequently observed this tiny Wader in the act of nest-making, scratching a hole with its little feet, then quickly sitting down and turning its little body round to form the required depression. Then the bird jumps up, and looking at the embryo nest, pushes a dead birch-leaf with her slender beak into the tiny hole. I measured the diameter of one nest containing four eggs, and it did not amount to 2¾ inches over all. The eggs are placed small ends together, and, owing to the depth of the nest, are caused to stand nearly on end, thus taking up very little space; indeed, if they lay on their sides, the small body of this Wader could not cover them. Frequently, when at the nest, the Stints would run round and round, almost coming within arm's reach; but their quickness of flight when surprised or frightened is astonishing. They seemed to have a special liking for the dry sandy banks of the Pulmakél close to its junction with the Tana. Here the sloping sand was sparsely overgrown with dwarf willows, and amongst the roots of the willows a coarse grass was growing, strewn with dead birch-leaves, and this the Stints seemed to prefer to any other place, although I afterwards found them breeding several hundred yards from water."

Messrs. H. J. Pearson and E. Bidwell, in their notes "On a Birds'-nesting Excursion to the North of Norway in 1893," write as follows with reference to this species †:—"Common in the Porsanger. Found several nests with full

* 'Ibis,' 1885, pp. 177, 178.
† 'Ibis,' 1894, p. 235.
clutches on one of the islands, on June 25th. In each case the male bird was sitting. The colour of the male harmonized much more with the herbage than that of the female. We had visited this island previously on the 17th; but, although we saw some of these birds and searched carefully, no nests were found, therefore most of the eggs must have been laid during the week intervening. The nests were all placed in short grass about 6 in. high—generally containing some dried grass of last year—on dry ground, not far from the houses, but the positions varied much, some on mounds or sides of mounds, some in hollows, others on level ground."

The late Mr. H. Seebohm writes *—"The eggs of Temminck’s Stint are four in number, and vary in ground-colour from pale buff to pale olive and pale greyish green; they are spotted and blotched with reddish brown and dark brown, and with underlying markings of pale brown and purplish grey. The markings are largest and most numerous on the large end of the egg, where they are often confluent and form an irregular zone or a large irregular mass. On many eggs there are a few dark streaks on the large end; and the small spots are generally distributed almost evenly over the entire surface. The eggs vary in length from 1·2 to 1·05 inch, and in breadth from ‘87 to ‘8 inch. It is impossible to give any characters by which the eggs of Temminck’s Stint may always be distinguished from those of the Little Stint. As a rule, the eggs of the latter bird are more buff in ground-colour, and the markings are larger, bolder, and a richer brown. Temminck’s Stint only rears one brood in the year."

Prof. Collett states that about ten clutches of eggs of this species, obtained by him in Finmark in 1880, measured from 1·22 to 1·04 inch in length, by ‘85 to ‘78 inch in breadth.†

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† 'Journal für Ornithologie,' 1881, p. 331.
COMMON SANDPIPER.
Totanus hypoleucus (Linnaeus).
COMMON SANDPIPER.

Scolopacidae.

TOTANUS HYPOLEUCUS (Linnæus).

EXPLANATION OF PLATE.

Figure 1. Lower Steeton, Yorkshire, May 19, 1889.
,, 2. Eardisland, Herefordshire, May 16, 1890.
,, 4. Lower Steeton, Yorkshire, May 20, 1892.
,, 5. Gatehouse of Fleet, Kirkcudbrightshire, May 20, 1892.
,, 6. Perthshire, May 24, 1891.
,, 7. Lapland, June 12, 1889.
,, 8. Aymestrey, Herefordshire, May 10, 1890.

This species is a common summer visitor to the British Islands.

Mr. Howard Saunders, describing the distribution of this Sandpiper in the British Islands, writes *:—“This species, often called the Summer-Snipe, is a regular visitor to the British Islands, usually appearing in April and leaving again by the end of September, though a few birds occasionally remain till November. Inasmuch as its favourite haunts are the gravelly margins of lakes or of running water, and islets of shingle with scanty herbage in trout streams, this Sandpiper is chiefly seen on migration in the south-east of England; but it breeds, sparingly, along the moorland brooks of Cornwall, Devon and Somerset, and perhaps in Dorset, Sussex, Kent and Buckinghamshire. In Wales, and in fact west of the Severn and north of the Trent, it is well known; while in Scotland it is to be found on almost every loch and burn throughout the mainland, ranging to the Outer Hebrides, Orkneys and Shetlands. It is generally distributed in Ireland.”

Mr. H. S. Davenport has kindly supplied me with the following extract relating to the Common Sandpiper, from his forthcoming ‘Original Sketches of British Birds’ :—“I made the acquaintance of this pretty little bird for the first time upwards of thirty years ago on the Teme, in Radnorshire. The ‘Summer-

* ‘Manual of British Birds,’ p. 591
Snipe’ of the local country folk was subsequently discovered to be common on the Lugg and Arrow in Herefordshire, and it is certainly one of the most familiar objects to be encountered by anyone who is assiduous in flogging the lovely trout-streams which intersect the upland glens and pastoral valleys of Merionethshire. I think I have found the Common Sandpiper most numerous on the river Lliw. I have known of three or four pairs breeding at the same time within hail of my summer quarters at Llanuwchllyn, while other pairs have asserted their presence on different stretches of the stream until its source is well nigh reached in the mountain passes. The species is likewise abundant on the Hirnant, Llafar, Little Dee, and Twrch, while the shores of Bala Lake provide it with a favourite retreat every spring-time.

"The Common Sandpiper is scarcely a timid bird, though it is apt to resent too close an approach on the part of a would-be observer. Yet, while frequenting the same haunts as the Dipper and Grey Wagtail, facilities for observing it are placed more within our reach from the fact that it is so frequently to be discovered searching for food in exposed places on the gravel and shingle adjoining running streams. It seems to be ever in motion, reminding one in this respect of a characteristic of the Wagtail family, and the tail is incessantly being flirted up and down. The bird shoots suddenly away when alarmed, skimming the water with rapid and much curved wings, and uttering a series of piping notes as it quivers along the surface. This note sounds in my ear like a shrill wheet, but it is obviously a question of individual taste as to its merit from a musical point of view. Not the least interesting feature in connection with the study of the species in its accustomed haunts is its mode of alighting with its wings inverted over its back.

"In spite of what may be urged to the contrary, my experience leads me to think that the Common Sandpiper nests far less often amongst the sand and shingle, covered with docks and other vegetation, directly flanking a river’s course than in the secluded banks, overhung with herbage and coarse growths, which abut indirectly on the stream. I only know that I have never discovered a nest in the first-named situation, while I have come upon dozens located in the contrary one. In May, in the year 1887, I took a nest, containing four eggs, which was placed on the very summit of an isolated pollard-willow adjoining the river Lugg, two or three fields distant from Mortimer’s Cross. This was a peculiar situation, but it struck me that there was more in it than met the eye; indeed, I credited the owners with a certain amount of reasoning power, for that spring I had tidings of many nests of the Common Sandpiper being built far away from the river’s bank, some being found in a wood on a steep hillside a quarter of a
mile distant. To make my meaning intelligible, however, I should say that the two preceding seasons had been associated with floods that submerged and devastated the low-lying pastures adjacent to the Lugg, and the nests of the Common Sandpiper had not escaped in the general destruction. My theory was that on the principle of 'experience teaches,' and in order to guard against a repetition of such ruthless contingencies, a complete change of habit—for the time being, at all events—had occurred with regard to the selection of local breeding sites on the part of this species. *

"On the last day of May, in 1894, I found a nest in a bank by the side of the main road and facing the head-keeper's cottage, which is situated beneath the ruins of Castell Carn Dochan, in Merionethshire. The river Lliw rippled peacefully along some fifty yards distant, and the situation of the nest was most exposed, and to my thinking would have admirably suited the requirements of a Redbreast.

"The favourite materials employed in the construction of the nest are fine dead rushes; dry grass and a few leaves are not neglected on occasions. The eggs are four in number, the ground-colour ranging between various tints of creamy white and pale buff, and they are mottled, blotched, spotted, and streaked with different shades of rufous brown, the underlying markings being of a slate colour. The female has recourse to quaint artifices when her nesting haunts are invaded, and though they are instructive to watch as evidence of the protective instinct with which a beneficent Providence has invested the species, it has not been without a pang that I have under the circumstances occasionally possessed myself of a clutch of eggs which at the moment I deemed essentially an acquisition to my collection.

"I always associate the Common Sandpiper with happy memories of bygone days in North Wales. The many scenes of natural loveliness I have not dwelt upon, nor upon the general nature of the landscape, which differs considerably from the quiet, cultivated beauty to be found elsewhere. Nevertheless, the stern and rugged character of some of the neighbouring hills, the sloping moorlands at a lower level adorned with clustering bracken and heather, and the retired loneliness of much of the country between Llanuwchllyn and Trawsfynydd—all this, I say, renders it an eminently romantic district. Nor must I be unmindful of the part played by the Lliw's slender stream winding peacefully through the various glens and adding a look of life, by its moving waters and attendant songsters, to the upland solitudes."

* [Further evidence in support of this theory will be found in the late Mr. R. Gray's 'Birds of the West of Scotland,' p. 297.—F. P.]
The late Mr. E. T. Booth relates the following incident, showing the attachment of a Common Sandpiper to its nest* :—"While fishing on the Lyon, in Perthshire, in June 1867, a Merlin made a sudden dash at a Sandpiper skimming across the river within twenty yards of where I stood. Instantly the bird dived below the surface, and did not emerge again till the shelter of some stunted willow bushes (whose branches overhung the water) had been reached. Forcing my way an hour later through the thick cover to reach a pool lower down the river, I disturbed, in an open space, some living creature that appeared, as it rapidly threaded its way among the shrubs and plants, to be either a rat or a rabbit. On searching closely, I came upon the nest of a Sandpiper with four eggs, and doubtless it was the parent bird that had attracted my attention. A collector of eggs who happened to be present was anxious to secure the clutch as specimens, and immediate steps were taken to ensure the safety of his treasures till our return from fishing. A stoat or two had shown themselves in a stone dyke near the river-bank, and, in order to guard against an attack by these destructive animals, a covering of coarse grass was first laid across the nest, and next a heap of sand and small stones was cautiously spread over to the depth of several inches. Late in the evening, on making our way to remove the eggs, we were much astonished on discovering that the bird had returned to its nest, and, in no manner disconcerted by the change effected, had scraped off the sand and grass and was again sitting."

Messrs. Buckley and Harvie-Brown give the following instance of the intelligence displayed by this Sandpiper in protecting its eggs†:—"Mr. Irvine-Fortescue informs us that he once flushed a Sandpiper off her nest after a heavy night's rain. The nest was filled with water, while the two eggs were up on the edge of the nest. The bird, finding the water rising in the nest, must have pushed the eggs up out of the nest, and then continued sitting on them."

In his description of bird-life on the Border moors between England and Scotland, Mr. Abel Chapman writes as follows with reference to this species‡:—"May 15th . . . . . This is also the date when the Sandpipers lay. As already mentioned, these charming little waders appear on every tarn and river, about the end of April, and no bird, not even the Swallow, is more intimately associated with the return of summer, than is this cheery and graceful little angler's companion. . . . . . By mid-May, the Sandpipers have laid their four pretty eggs

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* 'Rough Notes on Birds observed in the British Islands,' vol. ii.
† 'A Vertebrate Fauna of the Orkney Islands,' p. 219.
‡ 'Bird-life of the Borders' (London: Gurney & Jackson, 1889), pp. 41, 42.
under the shelter of some tuft on a shelving bank, among a bed of osiers, or such-like situation. Their nests being right in the fisherman’s track, are often discovered by the old bird fluttering out across the shingle, with well-feigned lameness. The young, pretty little grey things, spotted with black, are hatched early in June, and most of them have left the moors before the end of July. Yet as late as June 10th we have found nests of newly-laid eggs; these late sittings, as also noticed in the case of the Golden Plover*, being often remarkably handsome and strongly-marked specimens.”

The late Mr. H. Seebohm says the Common Sandpiper only rears one brood in the year; but if the first eggs are taken, others are generally laid near the site of the former nest. He gives the measurements of the eggs as varying from 1·6 to 1·4 inch in length, by 1·13 to 1·0 inch in breadth.†

Mr. H. E. Dresser gives the measurements of a large series of eggs of this species in his collection as ranging from 1·37 by 1·0 inch, to 1·47 by 1·02 inch, and 1·4 by 1·07 inch.‡

* [See the late Dr. Saxby’s remarks on late sittings of the Golden Plover, quoted in the present work.—F. P.]
† ‘History of British Birds,’ vol. iii. p. 120.
‡ ‘History of the Birds of Europe,’ vol. viii. p. 133.
WOOD—SANDPIPER.
Totanus glareola (L. F. Gmelin).

F. Poynning del.
WOOD-SANDPIPER.

Scolopacidae.]
TOTANUS GLAREOLA (J. F. Gmelin).

Explanation of Plate.

Figure 1. Finland, May 29, 1890.
          „  2. Lapland, June 27, 1886.
          „  3. Falkenswaard, North Brabant, May 16, 1889.
          „  8. Tornea Lappmark, June 10, 1890.

This species is a rare spring and autumn migrant to England, there being also a few records of its occurrence in Scotland and one in Ireland. There appears to be only one well-authenticated instance of its having nested in the British Islands (in Northumberland).

The late Mr. H. Seebohm describes the geographical distribution and nesting-habits of this species as follows *:—“The Wood-Sandpiper has a very extensive breeding-range. It has occurred in the Faroes, and is a summer visitor to the whole of Europe north of the valley of the Danube, to Siberia, Turkestan, Mongolia, and the extreme north of China. It probably breeds as far north as land extends, as Middendorff found its nest in lat. 70° on the Taimyr peninsula. It winters in the basin of the Mediterranean and in suitable localities throughout Africa. In Asia it winters in Persia, Beloochistan, India, Ceylon, the Burma peninsula, and the islands of the Malay archipelago, but only passes through Japan and South China on migration. . . . .

“I first made the acquaintance of this most interesting bird on the fjords of Lapland, near the Varanger Fjord, in 1874; but in the following year I had much greater opportunities of watching its habits in the valley of the Petchora. On

their first arrival they were absurdly tame, allowing us to approach within a few yards of them, as they frequented the pools formed by the rapidly melting snow in the streets of the town of Ust Zylma. A week later we found them very common at Haberiki, thirty miles further north. They were feeding on the edges of the marshes and the little forest tarns; and after we had shot one of them from the summit of a dead larch tree, between sixty and seventy feet from the ground, we became more reconciled to the name of Wood-Sandpiper. They were excessively tame and were in full song. The note which the male utters during the pairing-season is much more of a song than that of the Grasshopper Warbler, which it somewhat resembles; it is a monotonous til-til-il, begun somewhat low and slow, as the bird is descending in the air with fluttering upraised wings, becoming louder and more rapid, and reaching its climax as the bird alights on the ground or on a rail, or sometimes on the bare branch of a willow, the points of its trembling wings almost meeting over its head when its feet find support. This song is a by no means unmusical trill, and has an almost metallic ring about it. The alarm-note of the Wood-Sandpiper is somewhat like the tyū, tyū, of the Redshank, but much softer. With the exception of Temminck’s Stint, the Wood-Sandpiper was the commonest wader in the valley of the Yenesay; and in the valley of the Obb I found it equally common, feeding on the banks of the river in company with Common and Green Sandpipers.

"The nest of the Wood-Sandpiper is very difficult to find, and is generally discovered by accident in consequence of the female, who is a somewhat close sitter, flying off, and thus revealing the place where her eggs are concealed. This is generally in open country, not absolutely on swampy ground, but seldom very far from it: a patch of dry ground, overgrown with heath, sedges, and coarse grasses, is generally selected, frequently not far from a few stunted willow bushes, on which the bird not unfrequently alights. The nest itself is a mere hollow in the ground, lined with a few dry stalks and blades of grass. Captain Elwes and I found the Wood-Sandpiper not uncommon on the moors and swamps near Tarm, on the west coast of Jutland, in 1880. We took a nest of this bird containing four eggs on the 17th of May, on a moor within a mile of the village. When I was at Valconsvaard in 1876 I obtained two nests of this bird—one on the 14th and the other on the 23rd of May. . . . .

"The eggs of the Wood-Sandpiper vary in ground-colour from creamy white to dull buff and very pale olive, and are very handsomely spotted and biotched with rich reddish brown. The spots vary in size from a pea downwards, and in the widest part of the egg are often confluent. Occasionally the spots are evenly distributed over the egg, but at the smaller end they are generally less and more
scattered, and in rare instances very few and far between. The underlying spots are pale brown, and seldom very conspicuous. They vary in length from 1·55 to 1·4 inch, and in breadth from 1·1 to 1·0 inch. The only eggs at all likely to be confused with those of this species are exceptionally small and handsome eggs of the Green Sandpiper, which might be difficult to distinguish from exceptionally large and plain eggs of the Wood-Sandpiper.”

Mr. H. E. Dresser states that a series of nearly three dozen eggs of this species in his collection from Holland, Denmark, and North Germany, measure from 1·52 by 1·1 inch, and 1·42 by 1·0 inch, to 1·4 by 1·0 inch.*

The late Mr. John Hancock discovered the Wood-Sandpiper breeding on Prestwick Car, Northumberland, in 1853, and obtained the eggs †, the only authentic ones known to have been found in the British Islands, together with one of the parent birds. The following graphic narrative from his pen gives full details of his discovery ‡:—“The following account of an excursion to Prestwick Car will give you some idea of what could be done in bird nesting in that locality in a single day: it was however an extraordinary day, and was a very short one. I started, accompanied by the eldest son of the late Mr. Charles St. John, on the morning of the 3rd of June, 1853, rather for the purpose of showing my youthful friend the Car, than in any expectation of obtaining eggs, as the season was far advanced. We arrived at Berwick Hill, on the north margin of the Car, about eleven o’clock, after a pleasant eight miles walk. After receiving the hospitality of the late Mr. Richard Reay we commenced our ramble over the Car. That gentleman informed us that we should see no eggs, as several persons had recently been over the ground. This, however, did not matter much, as we had not come for the purpose of collecting eggs, but merely to look about us.

“It was one o’clock before we reached the heather; and here the Redshanks were flying in greater numbers than I had ever seen on any former occasion. Several pairs kept flying around above our heads uttering their wild, plaintive cry, or triple-noted whistle. From this it was evident that either their young or their eggs were not far off. And sure enough we had not proceeded many steps before we came upon a nest with four eggs: they were much incubated, and, being quite cold, were undoubtedly forsaken. We were now joined by Mr. Reay’s brother (Joseph) who, just before he reached us, had picked up a young Redshank,

* ‘History of the Birds of Europe,’ vol. viii. p. 149.
† One of these eggs is figured in Hewitson’s ‘Eggs of British Birds,’ 3rd edition, vol. ii. pl. xc. fig. 1.
considerably grown. We then strolled through the heather and found a Curlew's nest, with its full complement of eggs: these were also considerably incubated. We continued our ramble on the heather, when about three o'clock our dogs, a retriever and a setter, raised a bird about fifty yards in advance of us, which at once rose to a considerable height coursing about, rising and sinking somewhat in the manner of the Snipe, and like it, while sweeping downwards with outstretched tremulous wings, produced a peculiar drumming noise, but one much shriller than that of the Snipe, and almost amounting to a sort of musical whistle. From the strangeness of its actions and peculiar whistling or drumming noise, I was convinced that we had met with a rare bird, and that its nest was near at hand. I observed to my companions that it was either a Wood- or a Green Sandpiper, and that we must have its nest before we left the Car. I had just uttered these words when one of the dogs rushed forward and pushed its nose into the heather. Mr. Reay advanced, and, on examining the spot, said 'Here's the nest with four eggs, but they are all smashed excepting one.' A moment, however, sufficed to prove that the nest was that of a Snipe, though there was at first some difference of opinion expressed as to this. Nevertheless, I was quite satisfied that the nest of the strange bird was yet to be found. The dogs were now leashed. The birds were still in view flying about: our only chance now was to watch the bird to its nest. With a view to this I concealed myself amidst the heather, while my companions left the spot. It was not long before one of the birds 'pitched,' and, after allowing a little time for it to settle, I went forth to raise it, but did not succeed. The bird, however, was soon in the air again, flying about as before. The watching dodge was again tried, and this time the bird was marked to, and raised from, its nest. There lay the nest, with its four pretty eggs, on the side of a dry hillock where grew some heath and grass, in the midst of a swampy spot. It was evidently the nest of the Wood-Sandpiper, as the eggs agreed exactly with those of that species which I had, in my collection, from the late Mr. Hoy. Indeed, we got so near to the bird that it was not difficult to determine the species. But it was, notwithstanding, desirable to authenticate the eggs, so as to leave no room for doubt. We now made several vain endeavours to shoot the bird; and then, to give it time to settle, left the spot, and wandered, for about half an hour, to the west side of the heather, the nest being situated at the east of it. But, previously to our doing so, Mr. Reay strayed with me in the direction of the spot where I had at first lain concealed to mark the bird to its nest, and when we arrived within a few paces of the spot a Shoveller rose, and there, amidst the heather, was its nest containing eight eggs. On the return of our party towards the nesting-place of the Wood-Sandpiper we raised a Reeve, which
we had before sprung twice or thrice. This time it rose from its nest, in which were the usual four eggs in a perfectly fresh state. At length we reached the nest, the great prize of the day, but the bird was not on. Both male and female, however, soon made their appearance overhead, and a futile attempt was made to shoot them; they then both took off and settled by the side of a small pool in the middle of the heather. Mr. Reay then crept up and succeeded in killing the male bird. Thus, after several hours labour, we succeeded in establishing the fact that our find was really the nest of the Wood-Sandpiper. And we had the satisfaction of knowing that this was the only instance of its having been taken in Britain.

"Thus, in our afternoon’s ramble over the Car, we had found the nests of six species of water fowl, three of which must be considered rare; and one had never before been found breeding in the British Islands. . . . .

"Prestwick Car was drained in 1857, and, with the drainage, many objects of interest to the naturalist have disappeared from the district. . . . . The birds that congregated there have been dispersed, and several that had, on account of their breeding in that place ranked as residents, have now become mere visitants."

The late Mr. E. T. Booth appears to have narrowly missed discovering the nest of this Sandpiper in East Lothian. He writes*:—“Early in June 1867 I fell in with a pair evidently nesting on Gullane Links in East Lothian; the birds had taken up their quarters on the lower portion of the sandy flats towards the west, where there were large patches of green rushes and long coarse grass. My attention was first attracted by one of the birds darting through the air and going through much the same performance as the Common Snipe, though the sounds emitted were not so loud; these extraordinary antics were carried on for some time, and finally both birds were lost sight of during a prolonged flight towards the east. All would, without doubt, have gone well, and the nest been discovered, had not a Snipe appeared on the scene, and continued hovering round over the same spot, where it was shortly joined by another. Half an hour later one of the Wood-Sandpipers was again soaring over, dashing down in the same manner as previously witnessed; in a few minutes the Snipes were also circling round. As the number of birds on wing was somewhat perplexing when an attempt was made at a distance to follow the movements of the Sandpipers through the glasses, I determined to shoot one or, if possible, both of the Snipes, and leave the place clear for the inspection of the Sandpipers. An opportunity soon occurred, as one of the Snipes dashed round; but, unluckily, at the moment the trigger was pulled

* 'Rough Notes on Birds observed in the British Islands,' vol. ii.
one of the Sandpipers happened to be crossing the line of flight without attracting my attention, and both birds dropped to the shot. The Sandpiper, when examined, proved to be the female, and consequently all watching was at an end, as the male would without doubt now desert the spot. Though there were but slight hopes of success after this unfortunate mishap, a long and careful search was made; the nest, however, in the end remained undiscovered. That the birds nestled here in days gone by I have little doubt, as, while a temporary resident in this part of the country, studying farming at Ferrygate, near North Berwick, in 1863 and the following year, I noticed these birds in spring on two occasions and imagined them to be Snipes, not having had access to any of the works that described their habits during the breeding-season. The last time I went to inspect this favourite haunt of waders and wild fowl, a few years back, a change had taken place in the aspect of its surroundings, and it was evident that the former denizens of the slades and swamps had been compelled to seek other quarters.

Mr. H. Leyborne Popham has supplied me with the following interesting note on the Wood-Sandpiper. He writes:—"I have observed a hitherto unknown habit of this Sandpiper, namely, that it makes use of the old nest of Thrushes in the same way that the Green Sandpiper (T. ochrops) does. In the valley of the Yenisei, on June 17th and 18th, 1895, I found three nests so placed, and one in the usual position on the ground. I can only imagine that in this district it departs from its usual habit owing to the abundance of Fieldfares' and Redwings' nests available. The sites of the nests were not in any risk of being flooded; two at all events were on high ground, well above the spring floods." *

* [The discovery that the Green and Wood-Sandpiper have this habit in common seems to increase the probability of the habit being shared by the near ally of these two birds, the American Solitary Sandpiper.—F. P.]
YELLOWSHANK.
Totanus flavipes (J. F. Gmelin).
YELOWSHANK.

ScoLOpaciD.e.]
TOTANUS FLAVIPES (J. F. Gmelin).

EXPLANATION OF PLATE.

Figure 1. Lower Anderson River, July 1865. No. 11391.  
2. Anderson River, June 20, 1862. No. 7661.  
3. Rendezvous Lake, June 20 (1865?). No. 11387.  
4. Ditto.  
6. Ditto.

British N. America;  
R. MacFarlane coll.  
U.S. National Museum Collection.

There are only two authentic records of the occurrence of this American species in the British Islands, one in Nottinghamshire and the other in Cornwall.

Mr. Howard Saunders writes*:—"As a straggler the Yellowshank has occurred in Greenland; but its breeding-grounds are in North America from Hudson Bay to Alaska, extending as far south as Lake Superior, and perhaps to the vicinity of Chicago, where Mr. Nelson found the young barely able to fly on July 1st, 1874. On passage this species is generally distributed throughout the greater part of the United States, and is abundant along the valley of the Mississipi, though of comparatively rare occurrence to the west of the Rocky Mountains. It visits the Bermudas, Bahamas, and West Indies generally, as well as the mainland of tropical America, wintering as far south as the Chupat valley in Patagonia—where Durnford found it common during November—and also in Chili."

The late Dr. T. M. Brewer gives the following particulars respecting the breeding habits of the Yellowshank†:—"Mr. Kennicott, who found it breeding near Fort Resolution, states that it arrives there in the spring among the first birds. He describes its nest as of the simplest kind, it being merely a depression without any lining, at the foot of a small bush, in rather open ground, a rod from the edge of a marsh. Another nest was in an open place among sparse, low bushes—a simple depression, but lined with a few leaves and sticks.

* 'Manual of British Birds,' pp. 599, 600.
† 'Water Birds of North America,' vol. i. p. 277.
"Mr. MacFarlane found the nests of this species, lined with decayed leaves, on the Lower Anderson River; and in some instances they were near the edge of a small lake. Others were taken at Fort Anderson, some as early as June 2. The nests were all mere depressions, with a very scanty lining. The usual number of the eggs was four. In several instances the male bird was seen to perch on trees near the nest, in the manner of the Common Snipe. Some were already hatched by the 19th of June. When the pair had young, they were very noisy, going constantly before the intruder from tree to tree for several hundred yards beyond their nest. The young, even when just hatched, run and hide in the short grass, so as to make it difficult to find them, the parents, in the meanwhile, flying and screaming in the air above."

Dr. E. Coues gives the following description of the eggs of the Yellow-shank *:—"They are three or four in number, narrowly and pointedly pyriform, measuring from 1:58 by 1:18, to 1:78 by 1:15; the longest eggs not being always also the broadest. The ground is a clean clay-color, sometimes tending more to buff or creamy, sometimes rather to light brown. The marking is bold and heavy, but presents the customary great diversity, some eggs being very heavily splashed with blotches confluent about the larger end, while others have smaller clean-edged spots all over the surface. The markings are rich umber-brown, often tending to chocolate, sometimes almost blackish. The paler shell-markings are usually numerous and noticeable. An occasional 'albino' egg is seen, whitish, with scarcely any markings. All the many eggs examined are from Arctic America."

* 'Birds of the North-West,' p. 498.
GREENSHANK.

Totanus canescens (J.F. Gmelin).
GREENSHANK.
Scolopacid.e.]
TOTANUS CANESCENS (J. F. Gmelin).

Explanation of Plate.

Figure 1. Sutherlandshire, May 11, 1895. In collection of F. Poynting.
,, 4. Ditto. May 18, 1892.
,, 7. Tornea Lappmark, June 7, 1891.
,, 11. Tornea Lappmark, June 2, 1885.

The Greenshank is a spring and autumn migrant to the British Islands, an increasing number remaining during the summer to breed on the moors in the northern counties of Scotland. A few pairs probably also breed in the Hebrides.

Mr. J. A. Harvie-Brown, in his notes "On the Birds found breeding in Sutherlandshire" *, gives the following details respecting the Greenshank—
"This species is very generally distributed over the whole of Sutherland, extending into Caithness, and southward into west Ross-shire, west Cromarty, west of Inverness-shire, Argyleshire, and Perthshire, and is present in the Hebrides. I consider it far from an uncommon species in Sutherland. They are wild and wary, much more so than the Redshank, in the breeding season, and the male is wilder and shyer than the female.

"The cry of the Greenshank, from which it gets its local Gaelic name in West Sutherland—Teochreingh (the accent on the last syllable)—is somewhat like that of the Redshank, but slower, louder, and differently modulated. Those who

* 'Proceedings of the Natural History Society of Glasgow,' vol. ii. part 1, pp. 113, 114.
have heard both species should easily recognise either bird by the note alone. When flying overhead, or at some distance from the ground, the note is slow and clear; but when in the act of alighting, with the wings raised over its head, it repeats the note with great rapidity, the syllables running into one another. This is accompanied by a tremulous motion of the wings, very similar to what may be observed in the Common Sandpipers, or in the Curlews soon after their arrival in spring. The flight is rapid, though the strokes of the pinions are in slow, strong, regular beats, which appear to keep time with each syllable of the note. The mark by which a Greenshank is most easily recognisable, independent of its note, and mode of flight, and size, when rising from a loch-side or marsh, is the conspicuous white patch of feathers on the rump. It has, moreover, some resemblance, on the wing, to the Bar-tailed Godwit, though smaller, and is midway in size between that species and the Redshank.

"The eggs are difficult to find, and often the bird has to be watched to the nest. I have obtained a good many of their eggs from different localities, and am inclined to think that those having a pale green ground, with small distinct blotches, represent the type; though others, some of which I possess, have a darker ground-colour, with bold rich-brown and purplish blotches, confluent at the larger end. The Greenshank begins to lay about the 10th May in Sutherland, though in other counties some observers consider it amongst the earliest breeders of the Grallae. I have one laying taken on the 10th May, but of many others received, very few complete sets have been taken so early in the season."

Mr. T. E. Buckley has published the following notes on the breeding of the Greenshank in the east of Sutherland:—"This fine and interesting wader is fairly distributed through the east of the county, but is nowhere common. Its eggs are difficult to find, and are a prize when found. I knew of four or five pairs breeding in the district about Balnacoil, but only succeeded in getting one nest, which a shepherd found for me. Sometimes these birds sit very close on their nests. In 1869, at Altunaharra, I took a nest which was placed between two stones at the edge of a loch. Passing by the same place, when fishing, in 1871, I happened to think of the Greenshank, and there, between the same two stones, sat the old bird on her nest, and she allowed me to touch her with my fishing-rod before she went off. The first time I took the nest it only contained three eggs, two hard-set and the other added, the date being the 24th of May; the second time the nest contained four nearly fresh eggs, and was taken on the 26th of May. When the young are hatched the old birds are very bold and vociferous, coming

* *Proceedings of the Natural History Society of Glasgow,* vol. v. part i. p. 144.
down close above one's head with a swoop, and then shooting up into the air almost perpendicularly."

The late Dr. Saxby gives the following interesting account of his discovery of the eggs of this species in Shetland*:—"The Greenshank, though a regular autumn visitor to Shetland, and scarcely to be considered a common species, yet occasionally remains to breed. I had several times obtained undoubted specimens of the eggs from the shops in Lerwick, and once from Yell, but it was not until the 31st of May, 1871, that I found the nest, and then it was almost by accident. I was wandering along the margin of a small pool of water, where I had so often searched in vain that, although the bird was clamouring overhead, I was paying more attention to the sunset than to the ground. Presently, at my very feet, out flew the mate of the noisy fellow, now close at hand, leaving exposed its four beautiful eggs, lying on a little dry grass in a cavity between two tufts of coarse weeds; a welcome sight indeed, after so many years' fruitless search. The eggs were long and pointed; their average length one inch ten lines, their breadth one inch three lines; in colour they were white, tinged with yellowish green, spotted all over, and blotched at the large end with rich warm amber-brown and brownish purple, each of several shades. I have since obtained almost exactly similar specimens from Sutherlandshire."

The late Mr. H. W. Wheelwright writes as follows respecting the breeding habits of this species in Lapland†:—"But the finest and perhaps one of the commonest of our waders here was the Greenshank (Tot. glottis, Bech.; 'glutton,' Sw.; 'vikkla,' Lap.), which came up here among the earliest in the spring, and left certainly the earliest in the autumn. As I had now a good opportunity of studying the habits of this bird in the breeding-season, I was much struck with its resemblance to the Green Sandpiper. The wild nature of the bird, its loud shrill cry 'chee-wheat, chee-wheat,' as it dashes through the air with the speed of an arrow, and its partiality for woodland lakes and streams, all prove that it is more closely allied to the Green Sandpiper than any other of the genus, and, save that I always took the eggs from the ground, the habits of the one bird seemed exactly to resemble those of the other. The eggs of the Greenshank are often laid far away from water. I took a nest once upon a stony rise right in an open forest, about one hundred yards from a little beck, laid on a thin layer of leaves. The eggs, always four in number, are very large, pyriform; ground colour stone yellow-green, dashed all over with dark brown and pale purple-grey, especially at the thick end. I observed as soon as the young were hatched off, the old birds would

* 'Birds of Shetland,' p. 196.
† 'A Spring and Summer in Lapland,' by "An Old Bushman," pp. 351, 352.
lead them down to some grassy swamp in the forest, and I have met with three or four families in the same spot. It is now that the wild cry of this bird is heard to perfection if you enter the swamp with a dog; and it is a pleasing sight to see how little fear the old birds display in endeavouring to beat the intruder from the spot. No trying to allure him away by sham pretences, as the Lapwing and many other birds do, but a downright courageous attack, which never ceases till the dog is fairly beaten off. I have often seen the Greenshank settle in a tree."

Referring to this species the late Mr. H. Seebohm writes*:—"It is not at all social in the breeding-season, and scatters itself in pairs at long and irregular distances. Its nest is cunningly concealed amongst the heath and short herbage, and is very slight, being a mere depression in the ground, lined with a few bits of dry grass or withered leaves. Sometimes the nest is placed quite close to the water, in a similar position to that usually chosen by the Common Sandpiper, but more generally it is in situations similar to those selected by the Golden Plover or the Dunlin. Sometimes the nest is built in a tuft of grass, or on a little piece of higher ground surrounded with marsh. . . . . The eggs vary in length from 2.05 to 1.82 inch, and in breadth from 1.4 to 1.3 inch; they are not easily confused with those of any other British species. Only one brood is reared in the year."

Mr. H. E. Dresser states that a series of 20 eggs of this species in his collection (taken by himself in Northern Finland, by Meves at Archangel, and by Wolley's collectors at Muonioniska and Torneå, Lapland) measure from 1.8 by 1.3 inch to 2.1 by 1.3 inch, and 2.0 by 1.35 inch.†

* 'History of British Birds,' vol. iii., pp. 151, 152.
† 'History of the Birds of Europe,' vol. viii. p. 183.
BAR-TAILED GODWIT.

Limosa lapponica (Limosa).

F. Poynting del

Litho Wilhelm Greve Berlin
Scolopacidar.]  

B A R - T A I L E D  G O D W I T .  

LIMOSA LAPPONICA (Linnæus).

Explanation of Plate.

Figure 1. Sardio, Finland, 1863, taken by Wolley's collector. In collection of E. Bidwell, Esq.

2. Muoniovaara, Lapland, June 23, 1864, taken by Wolley's collector, received from Prof. Newton. In collection of H. E. Dresser, Esq.


5.* ) 6.*

This species is a regular spring and autumn migrant to the British Islands, numbers remaining throughout the winter.

Respecting the geographical distribution and nesting-habits of this species, Mr. Howard Saunders writes as follows †:—"The Bar-tailed Godwit is only a migrant along the greater part of the coast of Norway: its breeding-range commencing in Finmark, where Canon Tristram states that he obtained eggs. In Lapland the late Mr. Wolley and others procured authentic eggs; and it probably nests throughout Finland and Northern Russia, and Siberia. It is, however, a rare visitant to Archangel, and Messrs. Harvie-Brown and Seebohm only observed it once on the Petchora. On the coasts of the Baltic, Northern Germany, Denmark, and Holland, it is a regular migrant, but in the latter country and in France, it is less abundant than the preceding species [Limosa belgica]. It visits the Spanish Peninsula, Morocco, and the Canaries, and has been traced down the West African coast as far as the Gambia. It is irregularly distributed in winter along the shores and islands of the Mediterranean, and thence to Northern and North-eastern Africa, the Red Sea and the Somali country. It is also a winter

* Details respecting the discovery of these eggs are given by Mr. H. W. Marsden in the 'Zoologist,' 1892, p. 30.

SCOLOPACIDÆ.

visitor to the Mekran coast and Kurachée; and Blyth states ('Ibis,' 1865, p. 36) that there is an Himalayan example in the Derby Museum of Liverpool, and that Mr. Hodgson obtained it in Nepal; but it has not as yet been recorded in Southern India or Ceylon. In Siberia Mr. Seebohm obtained a solitary example in about 70° 35' N. lat. on the Yenesei; and Middendorff found breeding on the marshes of the Taimyr, in 74° N. lat., a bird with a more barred rump, which has been distinguished as var. novae-zealandica, G. R. Gray, and as L. uropygialis by Gould, who, however, in his 'Birds of Great Britain,' stated that he believed it was not separable. This form, of questionable distinctness, extends to Kamtschatka and Bering Island, migrating to Japan, China, the Eastern Archipelago, Australia and New Zealand.

"Details respecting the breeding habits of the Bar-tailed Godwit are scarce. The late Mr. Wolley obtained its eggs at Salmojervi, in Finland, on 29th May, 1858, but no account of his discovery has been published beyond his statement to Hewitson (Eggs Brit. Birds, ii. p. 343), that 'this species breeds in marshes, chiefly in the neighbourhood of mountains, and gets up so warily from its nest that it is difficult to find it.' Two eggs from Rowa, near Kittila in Finland, are figured in the above work; and others have since been obtained by various collectors. The ground-colour is light olive-green blotched and streaked with brown, and they measure 2.1 by 1.45 in., being similar to but rather smaller than those of the Black-tailed Godwit."

Mr. H. Leyborne Popham has kindly supplied me with some valuable notes on the breeding-habits of this species as observed by him on the Siberian tundra last summer (1895). He writes:—"The Bar-tailed Godwit (Limosa lapponica) nests on the tundra of Siberia, where I found it fairly plentiful near the mouth of the Yenisei between lat. 69° N. and 72° N., never more than one pair of the same species occupying the same district.

"The nest is extremely difficult to find, being only a slight hollow on a vast expanse of high-lying tundra, and lined with a few bits of dry grass. Both birds take part in the incubation of the four eggs (but I have found the male bird on the nest on three out of the four occasions on which I have been near a nest), one bird sitting very close, while the other meets the intruder at least a mile from the nest, and never leaves him till he is well clear of the neighbourhood, keeping up an incessant screaming both when standing on the ground and when flying round * . The nests were found between June 27th and July 3rd, 1895.

* [Middendorff observed the same habit in the form of this species (distinguished by some writers as L. uropygialis) which he met with on the River Taimyr. He says ('Sibirische Reise,' ii. p. 218) "it was not easy to find the eggs, as the bird, generally the male, met the intruder from a far distance with loud outcries, and thus did not betray the nesting-place like other waders."—F. P.]
"The call, as near as I can write it, sounded to me like 'koo-wák, koo-wák,' sometimes varied by 'koówi-koówi,' repeated rapidly. The behaviour of this bird reminded me somewhat of that of the Whimbrel, and each nest that I found was in the vicinity of one belonging to a pair of Buffon's Skuas, in the same way that Whimbrels share the nesting-ground of Richardson's Skuas in other countries; whether for mutual protection or not, I do not know. It is impossible to watch Godwits to their nests, like one can Grey Plovers, &c., as in the latter case the sitting bird instantly leaves the nest on the appearance of a stranger, and can be watched till it returns to it; whereas the sitting Godwits allowed me to almost catch them in my hand before quitting their eggs. The back of these birds so exactly resembled the ground that when I brought my man to within 6 feet of the bird, he could not see it. The Bar-tailed Godwit, like many other waders, occasionally perches upon tree-stumps; the hen bird I found much the bolder at its nest."
SHARP-TAILED SANDPIPER.

SCOLOPACIDÆ.

TRINGA ACUMINATA (HORSFIELD).

An example of the Sharp-tailed, or Siberian Pectoral Sandpiper was shot at Breydon, Norfolk, on August 29th, 1892; another is said, on less certain evidence, to have been obtained in the same county in 1848. These are the only British records. The eggs of this bird are unknown.

Dr. P. L. Sclater, after mentioning the principal references in ornithological literature to this species, summarizes its geographical distribution as follows *:—

"From this list it will be evident that the Sharp-tailed Sandpiper is widely distributed over the eastern part of the Palaearctic region, and visits the North Pacific Islands and Alaska during the autumn migration. In winter it passes far south over the Sunda Islands and the Pelew Islands to New Guinea, New Ireland, Australia, the Friendly Islands, and New Zealand."

The late Mr. H. Seebohm writes:—"The egg of the Siberian Pectoral Sandpiper is unknown, but there can be no doubt that the bird breeds in Siberia." †

Mr. E. W. Nelson observed the Sharp-tailed Sandpiper at St. Michaels, Alaska, and also on the coast of Siberia, near the North Cape, where he considers it probably breeds. He gives the following details respecting its habits ‡:—"On September 16, 1877, near Saint Michaels, I had the pleasure of securing a handsome young female of this bird, thus adding the species to our fauna. The bird was shot on the muddy bank of a tide-creek as I was passing in a kyak. Later in the season others were seen, and during each of the three succeeding autumns they were found to be one of the most common species of Snipe about Saint Michaels, frequenting the borders of brackish pools and tide-creeks, in company with T. maculata, the Red-breasted Snipe, and several other species.

"They were nearly always associated with maculata, whose habits they shared to a great extent. When congregated about their feeding places, they united into flocks of from ten to fifty, but single birds were frequently flushed

* "Ibis," 1893, p. 185.
† "Tom. cit." p. 183.
‡ "Report upon Natural History Collections made in Alaska between the years 1877 and 1881" (Washington, 1887), pp. 106, 107.
from grassy spots. Their motions on the wing are very similar to those of the latter, and they were rarely shy. On October 1, 1880, they were found scattered singly over the marsh, and rose 30 to 40 yards in advance, and made off with a twisting flight, uttering at the same time a short, soft, metallic 'pleep' 'pleep,' and, pursuing an erratic, circuitous flight for a time, they generally returned and settled near the spot whence they started.

“A single bird taken at Fort Clarence, Bering Straits, September 9, by Bean, is the only instance of its occurrence there. On the Commander Islands it occurs during the migrations. I do not think the bird breeds on the American side.

“On the north shore of Siberia, near North Cape, we found these birds very common, scattered over damp grass flats near the coast, the 1st of August, 1881. The ground was covered with reindeer tracks, and among these the Sharp-tailed Snipe were seen seeking their food. They were very unsuspicious, and allowed us to pass close to them, or circled close about us. From their movements, and other circumstances, I judged that this district formed part of their breeding grounds, whence they reach the neighbouring coast of Alaska in fall.

“They usually make their first appearance on the shore of Norton Sound the last of August, and in a few days become very common. They sometimes remain up to the 12th of October, and I have seen them searching for food along the tide-line when the ground was covered with 2 inches of snow. When feeding along the edges of the tide-creeks they may almost be knocked over with a paddle, and when a flock is fired into it returns again and again.”
The Curlew-Sandpiper is a spring and autumn migrant to the British Islands. Its eggs are unknown.

Describing the geographical distribution of this species, Mr. Howard Saunders writes*: "The Curlew-Sandpiper has not yet been obtained in the Faroes, Iceland, Greenland or Spitzbergen, while in Scandinavia and even in Finland it is principally observed on the autumnal migration, being very rare in spring. It occurs near Archangel, and Mr. Seebohm shot a female on July 15th at the mouth of the Petchora out of a small flock, while on the Yenesei, much further east, he killed a bird in nuptial-dress close to the Arctic circle on June 15th; but he did not reach its nesting-ground, and Dr. Finsch’s statement that he had found the downy young on the Yalmal Peninsula was afterwards corrected. Dr. von Middendorff was nearly successful, for he observed the bird dispersed over the tundras of the Taimyr in lat. 74° N. in June, and secured a female with a partially-shelled egg in her oviduct; Dr. Bunge noticed migrants passing over the Lena delta, probably on their way to the Liakov Islands; the ‘Vega’ expedition obtained a specimen close to Bering Strait on June 6th, 1879; and by a strange coincidence Mr. J. Murdoch procured the first Alaskan example at Point Barrow on June 6th, 1883. With this exception, the species is unknown in Arctic America, while it is of rare occurrence on the Atlantic sea-board of the United States. Returning to Europe, we find the Curlew-Sandpiper as a migrant on all the coasts and along several valley-routes, displaying its richest red plumage on the spring passage through the basin of the Mediterranean. In winter it is found down to Cape Colony and Tasmania, and all over the Indian region, the mountain-ranges of Central Asia offering no barrier to its progress."

The late Mr. H. Seebohm writes†: "The habits of the Curlew-Sandpiper during the most interesting period of its existence are absolutely unknown . . . .

† ‘History of British Birds,’ vol. iii. pp. 182, 183.
The breeding-grounds of this bird are most probably on the wild lonely tundras that stretch for miles and miles along the shores of the Arctic Ocean, from North Russia eastwards to the Pacific. . . . Like the eggs of the Knot, those of the Curlew-Sandpiper are still a prize which some adventurous ornithologist has yet to secure."
KNOT.

Scolopacide.)
TRINGA CANUTUS, LINN. EUS.

The Knot is a common winter visitor to the British Islands. Authenticated eggs of this bird do not appear to exist in any collections*, unless the egg† in the British Museum can be considered authentic.

Mr. Howard Saunders describes the geographical distribution of the Knot as follows‡:—"To Iceland and the south of Greenland the Knot is a visitor on the way to its breeding-grounds, which, according to the earlier Arctic explorers, were found on Melville Peninsula, and also—much further to the north-west—on Melville Island, one of the North Georgian or Parry group, whence no identified eggs, however, appear to have been brought back. In 1876 Col. Feilden, naturalist to H.M.S. 'Alert,' searched in vain for them, but on July 30th a male and three nestlings were obtained near a small lake on Grinnell Land in lat. 82° 33' N., while Mr. Chichester Hart, naturalist to H.M.S. 'Discovery,' captured a brood of four in lat. 81° 44' on the 11th, three more being taken next day; a beautiful group of the old and young is in the British Museum. An assertion in the 'Auk' that the egg has been obtained on Lieut. Greely's expedition, requires confirmation.§ West of the Parry Islands the Knot can be

* Mr. Walter Raine describes and figures ('Bird-Nesting in North-West Canada,' p. 188, pl. iii. figs. 1 & 2) two eggs stated to be those of the Knot, and taken at Radodavnsi, Iceland, on June 20, 1889. It is not stated, however, that the parent-birds were either shot or identified. Reputed eggs of the Knot are also figured by Thienemann ('Fortpflanzungsgeschichte der gesammten Vögel,' Taf. lix. 3 a, b, c, d) and by Baedeker ('Eier der europäischen Vögel,' Taf. 71, Nr. 6), without any confirmatory evidence.

† With reference to this specimen, Dr. R. Bowdler Sharpe says ('Handbook to the Birds of Great Britain,' vol. iii. p. 235):—"One egg is in the British Museum, to which it was presented by the late Mr. Seebohm, who states that it was from a clutch of four sent with the parent bird from Disco in Greenland to Mr. Verslser in Copenhagen, who had received it from Mr. Bolbroe, the original captor. . . . . . . It looks exactly like the kind of egg one might expect the Knot to lay. Axis, 1'6 inches; diam., 1'1.'"

‡ 'Manual of British Birds,' pp. 581, 582.
§ [General Greely states, in his 'Three Years of Arctic Service' (vol. ii. pp. 377, 378), that an egg ready to be laid was taken out of a Knot near Discovery Harbour on June 9th, 1883. He
traced to Alaska, where it is not plentiful; but in Arctic Siberia its representative is *T. crassirostris*, which has a black breast in summer; our bird being of very rare or irregular occurrence, though it has been recorded from Daûria, China and Japan. Mr. Seebohm did not meet with it on the Yenesei or the Petchora, nor has it been found in Novaya Zemlya or Spitzbergen. On migration it visits the coasts of Europe, and the west side of Africa to Damara-land, but is seldom observed in the Indian region, though it goes as far south as Australia and New Zealand. In America it is well known on passage along the Atlantic sea-board, and has been found in Jamaica, while a single specimen has been obtained in Brazil."

Mr. H. Chichester Hart, in his "Notes on the Ornithology of the British Polar Expedition, 1875-6," writes as follows *:* "On the 4th August, 1875, I saw half a dozen Knots in Hayes Sound, lat. 75° 56', and on the 25th several were feeding along the shore, in company with Turnstones, in Discovery Bay. In the following year the first Knot I saw was upon the 31st May; after that they became frequent. On their first arrival, and until absorbed in their breeding duties, they were very wary, often feeding far inland by the loneliest swamps and pools. A pair of Knots which had evidently selected a breeding-place, upon finding they were watched, deserted the site entirely. When courting, Knots play with one another upon the wing, and upon the ground, in a most entertaining manner, pursuing, avoiding, and encouraging one another; while the clear, sweet flute-like whistle of the male is frequently heard. Later in the year, July 11th and 12th, when the young ones were just hatched, I was much interested in watching the parents carrying on the same manoeuvres as the Lapwing to decoy the intruder from the young; running along the ground with outspread wings, feigning lameness, and taking short flights to re-alight suddenly close to one's feet. In spite of most painstaking search and the offer of liberal rewards, all efforts to obtain the eggs of the Knot were unsuccessful. Upon the 11th July a brood of four, disturbed from the nest, were captured and brought on board alive. The nest was placed under a large flat stone, resting on two others which formed a sort of gangway; it was merely of leaves and dry grass, loosely laid

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describes the egg as being a light pea-green in ground-colour, closely spotted with brown in small specks, about the size of the head of an ordinary pin, and measuring 1½ by 1½ inch. On the other hand the late Mr. H. Seebohm states ('British Birds,' vol. iii. p. 174) that General Greely informed him that it was "a very handsome egg, very boldly blotched, and about as large as that of the Common Snipe."—F. P.]

* * Zoologist," 1880, pp. 205, 296.
together on the earth by the edge of a stream; I could find no trace of the egg-shells. Upon the following day three more young were caught; these were apparently a couple of days out of the shell, grotesque little things, very lively and active, with large dark eyes, the body very small, and the wing-pinions just showing. Their feet were almost as large as those of the full-grown bird, and they were able to run at a marvellous rate. Both the young broods were found three or more miles inland, and in each case close to a stream. Of a number of Knots’ stomachs examined, only one contained any food; this consisted of two caterpillars (Dasychira grænlændica, Wocke), one bee, and pieces of an Alga (Glaeocapsa magna, Klr.). Dr. Coppinger saw Knots frequently in Polaris Bay during July, 1876; he met with one brood of five young together among stones.”

Respecting the pairing habits of the Knot and the capture of the young in down, Col. H. W. Feilden writes*:—“On 5th June, 1876, when camped near Knot Harbour, Grinnell Land (lat. 82° 33’ N.), we noticed the first arrival of these birds; a flock of fourteen or more were circling over a hillside, alighting on bare patches, and feeding eagerly on the buds of Saxifraga oppositifolia. Subsequently we met with this bird in considerable numbers; but they were always very wild and most difficult of approach. The cry of the Knot is wild, and something like that of the Curlew. Immediately after arrival in June they began to mate, and at times I noticed two or more males following a single female; at this season they soar in the air, like the Common Snipe, and when descending from a height beat their wings behind the back with a rapid motion, which produces a loud whirring noise. During the month of July my companions and I often endeavoured to discover the nest of this bird; but none of us were successful; however, on the 30th July, 1876, the day before we broke out of our winter-quarters, where we had been frozen-in eleven months, three of our seamen, walking by the border of a small lake, not far from the ship, came upon an old bird accompanied by three nestlings, which they brought to me. The old bird proved to be a male; its stomach, and those of the young ones, were filled with insects. The following description of the newly hatched birds was taken down at the time:—Iris black; tip of mandibles dark brown, bill dark olive; toes black, soles of feet greenish yellow, back of legs the same; underpart of throat satin-white; back beautifully mottled tortoise-shell.”

* “List of Birds observed in Smith Sound and in the Polar Basin during the Arctic Expedition of 1875-76,” *Ibis,* 1877, pp. 407–408.
Describing his efforts to find the eggs of this bird, Colonel Feilden writes *:

"Night after night I passed out on the hills trying to find the nest of the Knot. Not a day passed without my seeing them feeding in small flocks; but they were very wild, rising with shrill cries when one approached within a quarter of a mile of the mud-flats on which they were feeding. It is very extraordinary, considering the hundreds of miles traversed by myself and my companions,—all of us on the look-out for this bird's eggs, and several of us experienced bird's-nesters,—that we found no trace of its breeding until the young in down were discovered."

* "Notes from an Arctic Journal," 'Zoologist,' 1879, p. 107.
SOLITARY SANDPIPER.

SCOLOPACIDÆ.

TOTANUS SOLITARIUS (WILSON).

There are only three British records of the occurrence of this American species. An example was shot in Scotland, another in the Scilly Islands, and the third was obtained in Cornwall. Authentic eggs appear to be unknown.*

MR. HOWARD SAUNDERS describes the geographical distribution of the Solitary Sandpiper as follows †:—“In America the ‘Wood-Tattler,’ as it is often called, appears to be generally distributed during the breeding-season from the vicinity of the Arctic circle southward to about 44° N. lat., and across the continent from the Atlantic to the Lower Yukon in Alaska. Many ornithologists have observed it in summer, and Mr. Nelson has several times taken the young when just able to fly in Illinois, yet nothing is known of its nidification, for the description and dimensions given by the late Dr. Brewer of an egg taken in Vermont and ascribed to this species indicate a strong probability of some error.‡ The spring arrival in the United States takes place in May, while the return migration begins in July in the northern districts, and even in the south few individuals remain after October. On passage this bird visits the Bermudas, the West Indies, Mexico and Central America, but its principal winter quarters are further south, in Brazil, Paraguay and the River Plate States.”

The late Dr. T. M. Brewer observed a pair of Solitary Sandpipers under circumstances which he describes as follows §:—“Early in August 1878, I noticed a pair of this species with a brood of four young hardly able to fly, near an open reservoir of rain-water, on Appledore, Isles of Shoals. These were too young to have come to that island over the water, the distance being nine miles: and that

* Capt. Chas. Bendire (Hon. Curator Oological Department, U.S. Nat. Museum) informs me that he does not know of a single fully identified egg of this species in any collection. He considers it possible that, like the Green Sandpiper, it nests in trees, and that this may partly account for the nests having hitherto escaped observation.

† 'Manual of British Birds,' p. 597.

‡ [The egg referred to is figured by Mr. Elwin A. Capen in his ‘Oology of New England’ (plate xix. fig. 6).—F. P.]

§ 'Water Birds of North America,' vol. i. p. 282.
this brood could have been hatched on that rocky and treeless island seemed very improbable. They were in company with, yet holding aloof from, several pairs of *Tringoides macularius*. My near presence at first appeared greatly to alarm the parents; but they were soon quieted, as I did nothing to disturb them, and they then resumed their search for worms in the black mud on the edge of the water."