LETTERS

TO

YOUNG SHOOTERS

THIRD SERIES

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LETTERS

TO

YOUNG SHOOTERS

(THIRD SERIES)

COMPRISING

A SHORT NATURAL HISTORY OF BRITISH WILDFOWL

AND

COMPLETE DIRECTIONS IN SHOOTING WILDFOWL ON THE COAST AND INLAND

BY

SIR RALPH PAYNE-GALLWEY, BART.

WITH TWO HUNDRED ILLUSTRATIONS BY
MR C. WHYMPER, MR J. G. MILLAIS, MR DE BREE, AND THE AUTHOR

LONGMANS, GREEN, AND CO.
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PREFACE

I HAVE constantly heard Wildfowl-Shooters complain that there is no reliable work available at a moderate price—treating both of gunning *and* Natural History—to which they can refer for information on their particular branch of sport. The fowler also declares that in order to ascertain the habits and species of any of his favourite birds of mere and marsh, of sea-shore and tide, he is forced to purchase for reference some costly and bulky volume. This though it may contain the few birds he *does* require to identify, probably includes thrice as many he has no interest in whatever, the figures and descriptions thereof he would willingly dispense with, and save his pocket as a result.

Sparrows, Thrushes, Linnets, Finches, and a host of other non-sporting birds, however much they may entertain some folk, are of little interest to the fowler, who would rather exclude these and turn over pages depicting merely the Swans, Geese, Ducks, Waders and Plovers, he so dearly loves!

In this series I have tried to supply the fowler with what he requires, for—besides full advice in the use of his gun—he will find herein a description of all the wildfowl that are common to, or have been obtained in, the British Islands:—those he is likely to shoot, as well as those it is not probable he will meet with, but yet *may* have the good fortune to encounter.

I have spared no expense in my endeavour to give the wildfowl shooter just what he wants, and what I many times wished for myself when I first pursued the fascinating sport of fowling. To this end I have enlisted the assistance of the best artists procurable:—gentlemen who are accomplished fowlers themselves, and who can, from their long experience of wildfowl on the coast and inland, sketch any bird, Swan, Goose, Duck, or Plover, to the life!

I have avoided all technical terms and given as short and simple a history, both naturalistic and (where applicable) sporting, of each species as I can, and with, I trust, sufficient lucidity for easy instruction.

The illustrations of stanchion-gun shooting are small reproductions of a series of oil pictures painted for me by my friend Mr. Anthony de Bree. These pictures do Mr. de Bree infinite credit, as the original studies were sketched in mid-winter on the coast, in the haunts of the Geese and Ducks (in some cases a mile or two from land on the desolate and treacherous sandbanks), and often under great difficulties of wind and tide, of frost and snow. The artist, as he worked

away with brush and pallet, was frequently above his knees in mud or water, and his easel secured from capsizing, or being blown out to sea, by an arrangement of stones and ropes, or through being lashed to an oar imbedded upright in the ooze!

These drawings of sport with fowling-punt and stanchion-gun I have spread throughout the book rather than grouped them together in the few letters that treat of this subject. They can be easily referred to; each picture tells its own story, and is appropriate to the descriptions of the various Ducks and Geese.

My thanks are especially due to my friend Mr. W. Eagle Clarke, of the Science and Art Museum, Edinburgh, who has very kindly assisted me to revise the pages that treat of Natural History.

Thirkleby Park, Thirsk,
October 1896.

A FEW NOTES ON THE ILLUSTRATIONS AND DESCRIPTIONS CONTAINED IN THESE PAGES

It is well I should point out that no book can pretend to give a complete series of pictures of wildfowl as they appear at *all* periods of their existence, for the plumage of a bird usually varies as to whether it is young or old; and often whether it be a male or a female, and the season summer or winter.

It is this variation in accordance with age, sex, and seasonal dress that so frequently puzzled the naturalists of former days, and induced them to occasionally bestow a couple, or more, of names on one kind of Duck or Wader.

Many ignorant shooters on parts of the coast even now insist that the female or young of some Duck or another is a totally different bird from its adult male! A fowler may, for example, kill a female 'Pintail,' or perhaps a young 'Scaup' or 'Pochard.' With a view to identification he compares his trophy with the old male as shown in a book or collection, and unless he has some knowledge of the characteristic markings of

the species in question, he will detect little resemblance between his specimen and the handsome full-plumaged bird of the picture or museum.

I have thought it advisable to give as many local names as I am acquainted with, as these are often, I find, of great assistance when a shooter wishes to ascertain the kind of some bird he has killed.

It has been my wish that the birds should be represented in their natural surroundings, and I consider the artists have met my views in this respect with every success.

In the descriptions of the various wildfowl the *lengths* and *weights* given apply to *adult male* birds.

The *length* of any bird is from the tip of its bill to the end of its tail.

The *sketches* chiefly depict *adult males* in full plumage, whether this be worn in summer, as in most of the Waders, or in winter, spring, and early summer, as in the Ducks. If a bird has a characteristic summer or winter dress, and is given in either of these, it is noted at the foot of the illustration.

In the case of birds that have a distinct *summer* and a distinct *winter* plumage; the former is usually

worn from April or May to August, and the latter from October or November to February. The intervening months being occupied by the bird in changing from its complete summer to its full winter dress, or the reverse.

It is, however, impossible to fix these periods with any degree of precision, for not only does the date of assumption of summer and winter dress vary considerably in the different groups of birds, but also varies much both among species and individuals.

With the exception of *very rare* stragglers to our Islands, the birds are described from *fresh-killed* examples, as I have always found that preserved specimens are apt to *lose* their colour, particularly in regard to their *feet* and *bills*.

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Erratum

Page 295, last line, *for* $\frac{5}{8}$ in. long, *read* $\frac{7}{8}$ in. long.

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STANCHION-GUN SHOOTING

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BLOWN OUT TO SEA BY AN OFF-SHORE GALE, AND RESCUED IN THE NICK OF TIME. OR OVER WOULD HAVE GONE THE BIG GUN (MOORED TO A PADDLE TO MARK THE SPOT) AS A LAST CHANCE OF SAVING THE PUNT AND HER CREW

LETTERS TO YOUNG SHOOTERS

(THIRD SERIES)

LETTER I

WILDFOWL-SHOOTING—INTRODUCTORY

Of all sport with the gun, Wildfowl-Shooting is, in my opinion, the most absorbing, and a man who has once tasted its pleasures rarely loses a chance of enjoying them, so long as his health and strength permit him to do so. When, perhaps, rheumatism and old age prevent the fowler from following the Ducks and Geese on marsh or tide, his delight will be to revel in reminiscences of bygone times, and shoot his birds over again by the fireside, with, maybe, the roar of the wind in the chimney as a reminder of many a wild night or day passed ashore and afloat.

The escapes, the adventures, the successes, and the many, very many, disappointments incidental to the fowler's life are burnt into his memory.* His surroundings are grand and desolate, his sport is pursued in a solitude akin to sadness, his long lonely wander-

* The sketch opposite illustrates one of the numerous 'escapes' experienced by the Author.

ings by sea and shore, his silent hours of waiting in sight of Nature at her wildest, the whistle of the wind and break of the wave, all tend to make the fowler both thoughtful and reserved, and in a humble class of life even superstitious. I may safely say I very rarely knew a real lover of wildfowl-shooting, rich or poor, who was not a true sportsman at heart, or who had not a patient and unselfish disposition.

The pleasant gathering of shooters at the wood side, the rush of the Pheasants out of covert, the cheery aspect of the Grouse moors with their accompaniment of men and dogs, the marching over the stubbles and turnips in search of Partridges, are well enough in their way, and the sociability that goes therewith is in itself agreeable.

The fowler can appreciate such enjoyments with anybody; but as years roll on he may realise he is not *quite* so anxious to kill Pheasants, Partridges, and Grouse as of yore, and that a day's game-shooting, good though it be, does *not* offer the same attractions to him it was wont to in his younger days. Talk to the fowler, however, about the coast and its Wild-Geese, of the tidal river and its Wigeon, and I warrant you he is all alive; tell him of a pool which a few Teal frequent, of a distant hill the Ducks and Mallards flight over from the banks at sea on their way to the flooded marshes beyond—why, his gun is in his hand in a moment. Remind him of business, pleasure, dinner, or bed, you will find these go for nothing, and must take their

chance when wildfowl are about, so far as *he* is concerned.

What endless interest there is too in the birds the fowler is associated with; they are like old friends to him, as year after year they migrate to our shores. He has names for them all, though some of these be unknown in 'Yarrell'; but his names, mind you, are not seldom derived from what he observes of the habits, plumage, or cry, of the birds he follows with his gun.

To the ordinary game-shooter a Wild-Goose represents the whole group; a Wild-Duck is often similarly classed; a Swan is nothing but a Swan and there's an end of it; and a Plover, whether green, golden, or grey, is simply a Plover and good to eat. But the poorest fowler knows better than this, for has he not shot at least five if not six kinds of Wild-Geese? He can tell you there is a great Swan and a smaller one; he can also tell you that what with one Duck and another he recognises at least a dozen, and has shot them too! As to Waders, Divers, and Grebes, he will astonish you with how many there are; and though he may not ken their Latin or even correct English names, he will, if you show them to him in a museum, evince a wonderful knowledge of the haunts and habits of each kind, other than the rarest, for his life is passed in observing them—a study that is obligatory to every fowler who hopes for success.

The wild wastes of water and ooze, the sluggish tide creeping up the channels, and the dreary scenery

amid which wildfowl-shooting is generally practised, are enchanting to the fowler in their suggestion of loneliness, though such grey and barren surroundings might create a feeling of depression in any one else.

The dreaded east and north winds are a joy to the fowler; and the harder they blow, and the longer they last, so do his spirits rise. Bitter frost and deep snow are what he prays for, the cold winds and hard weather insuring him sport, be he the fortunate shooter who owns a gunning-punt and great-gun, or merely one who tramps the marsh and sea-shore, watching and waiting from morn to night for a shot at a stray Duck or two.

What marvellous endurance and perseverance the poor fowler shows is known to few. Many a time have I seen him shoulder his gun and spade at the close of a hard day's work and plod knee-deep through the slimy ooze for a mile or more from land, there to dig a hole in which he will crouch for half the night, wet to the skin and starved with cold, on the mere chance of killing a couple of Wild-Duck by moonlight as they drift towards him on the flowing tide.

These coast fowlers who shoot at night from holes they excavate in the mud-flats often run great risks, as from exposure and exhaustion they sometimes fall asleep. They are then liable to be surrounded by the incoming tide, when escape is of course impossible, or they may wander in the darkness seaward instead of towards the land when making for home,

and I have known several instances of their being lost through such misadventures.* It is men like these, brave, hardy, and observant, as they are, who can give a finished lesson in killing Ducks to the novice, for no one knows the *secrets* of wildfowl till he has studied their habits at night, and especially during the hour after sunset and the hour before sunrise—times when nearly all sea and shore-birds are on the move either to feed or flight.

Had I to make choice of a winter's sport I would prefer a cottage by the tide, with wildfowl-shooting hard by, to a palace inland and coverts crowded with game at its door. What can be more delightful to a lover of wildfowl than to take up his abode in their midst, or to a man whose thoughts dwell with pleasure on the sea and shore, and the great wind-swept banks of weed and sand, than to live within sight of them and their attendant bird-life? Even if by reason of adverse weather he cannot go a-gunning, he has a

* Some of the men who shoot in this fashion take a dog with them to retrieve their winged birds, though few dogs can survive for long the exposure this style of fowling entails. These men are, however, partial to canine company, as, should they fall asleep and the tide threaten to surround them, a dog will generally warn the sleeper of his peril. Yet I well remember one morning at dawn, after a fearful night of storm and snow, sighting through my glass what appeared in the distance to be a bundle of rags washed up by the sea (on a great lonely sand-flat), and which was kept guard over by a dog, poor cur though he was, and this we found to be the body of his late master, a local fowler, who had been overtaken by the flowing tide when far from shore, and drowned in the dark some hours before.

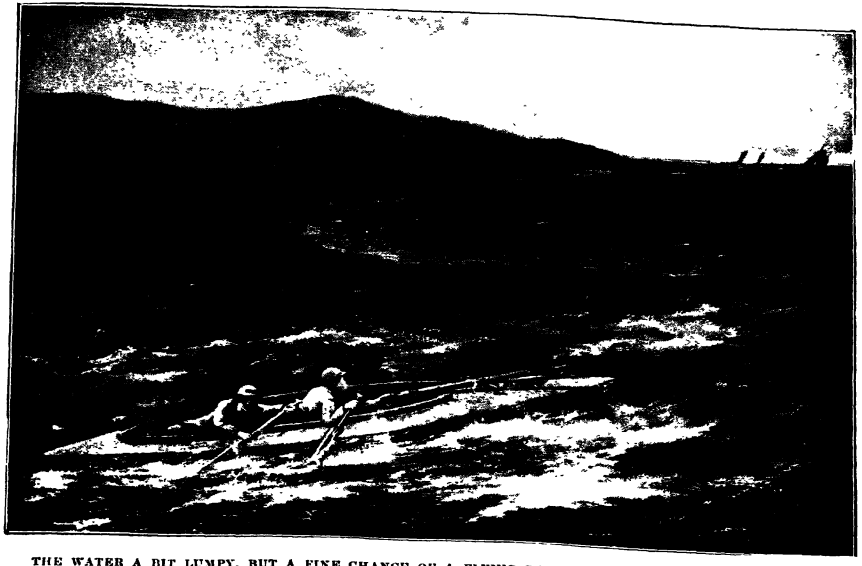
constant interest in spying the Ducks and Geese through his glass, and in thinking of the sport that *may* come on the morrow.

Then, again, how the long dark evenings slip by, and how much there is to do in preparation for the ensuing day; for a fowler's life is a busy one, out from daylight to dusk and perhaps half the night; his hands are full enough when at home.

The calm days and bright sky that delight the game-shooter are as poison to the fowler, who asks for the rough hard weather that will first bring his birds to the coast, and afterwards tame them. What odds to him that the casements and door of his cottage are shaken in the tempest as by the hand of a giant! That the hail beats a tattoo against the window panes like the drums of a marching regiment, and the glorious easterly gale thunders and echoes outside his snug shelter with a sound as though rival fleets were pounding each other with their big guns far away at sea! For the sweeping wind, the driving storm, and the bursting surge are as music to the ear of the fowler.

To make a young shooter's heart beat fast he need merely stalk, gun in hand, but a dozen Ducks, and as he crawls gradually nearer and nearer to them, he may experience *anxiety* such as he has never felt before!

He will realise, too, what the sensations of *hope* and *fear* are, if he be stealing up in his fowling-punt to a thousand or two Brent Geese, his stanchion-gun loaded



THE WATER A BIT LUMPY, BUT A FINE CHANCE OF A FLYING SHOT AT THE BRENT GEESE, IF WE CAN ONLY WEATHER THE POINT

and full cocked, and his finger on the trigger. He will also discover what perfect content means, or blank dismay, according to whether the birds allow him to give them a royal salute of powder *and* shot, or rise out of range.

Many a time, in a toss of a sea, have I poled, foot by foot, on the too slowly flowing tide, toward a legion of Ducks and Geese, with my watch hung round my neck and tucked inside my coat-collar to keep it dry, whilst I lay prone for an hour and more in the two or three inches of freezing water that was washing about the floor of my gunning-punt. And yet, from the pleasurable anxiety aroused by the just possible chance of a shot, felt neither cold nor wet.

There is no doubt a fowler's life is full of hope: he hopes for fine weather, rough weather, gales, calms, frost and snow; for north, south, east, or west winds, or for no wind at all! He hopes the birds will sit, will fly, will swim; he hopes for dawn, for dusk, for sun, for moon, for stars. He hopes for high-water or for low-water. There is, in fact, no variation of time, or tide, or weather, or light, or darkness, that he does *not* at one time or another hope for, as his chances of sport are served thereby.

As to the stanchion-gun shooter, *his* predominant hope is that *some* day he will make a *really* good shot, and his lifelong regret is that he missed, or, worst fate of all, his gun missed fire, when the one magnificent opportunity of his whole sporting career

was before him of making 'the finest shot ever known.' Hope indeed! if hope would bring us fowlers good sport, there would soon be no Ducks and Geese left alive to shoot at.

The more I see of wildfowl-shooting the more am I convinced how slightly is success therein achieved by luck, and how very much this sport is dependent upon experience and a skilful use of the favourable moment, whatever be the time, trouble, and money expended thereon by its votaries.

What a grand recreation it is, this stalking with punt and stanchion-gun the Ducks and Geese that frequent the coast, only those who practise it can tell. The fascination it has for the man who follows the pastime is known to himself alone, and, to my mind, there is nothing in the realms of sport comparable, for excitement and interest, to the pursuit of wildfowl with the big-gun.

You may fire at thousands of fowl on foreign shores, and, perhaps, in a few hours bag your hundred couple and over; yet, when you return home and have to be satisfied with a dozen birds at a shot instead of fifty or sixty as when abroad, where wildfowl are still in myriads, you will find you are just as keen to obtain, and just as pleased at killing, the smaller number.*

* Why! Simply because, whether you kill many or few birds, the smaller total will probably require as great an outlay of patience, skill, and endurance to obtain it, as the larger!

Let so-called humanitarians rage in their ignorance and condemn what they term a massacre of innocent birds! Ye gods! what a dance these same innocents lead us fowlers, and how few of them we kill in proportion to what we see!

Sea-fish and salmon are netted wholesale, and, as wildfowl on the coast *will* also congregate in hundreds, they too have to be killed in numbers at a time or not at all. Let the scoffer sally forth with his game-gun, and he will not bring in one bird of the thousand or two Wigeon he sees floating on the tide; yet with a proper equipment of punt and stanchion-gun a man will soon bag his score or two of these very fowl, beautiful to look at and excellent for food.

The oft-repeated cry that the stanchion-gunner wounds a larger proportion of birds than he bags and leaves them to linger in misery is another of those fallacies that annoy a fowler from the mere difficulty of refuting it, for 'tis of little use drumming into the head of the bigoted critic that the great-gun shooter, by reason of the heavy shot he uses, generally kills two-thirds of his Geese and Ducks clean, and that should he happen to wing any they are usually all retrieved—they are too precious to lose.

But these arm-chair critics of big-gun shooting would have us, right or wrong, believe the sport is a cruel one. They would rather ride their hobby to death, and see the poor gunner or fisherman of the coast perish of starvation in winter than that

they should, by hard, honest, and often dangerous labour, when fish are few and work is unobtainable, support their families and themselves by the stanchion-gun!

However, so long as kind Providence sends us companies of Ducks, Wigeon and Geese, I will vouch the big-gun shooter takes toll of them, rather than see what represents to him sport, food, or money, as the case may be, fly off without molestation to other climes.

If any man happens to wound the Ducks and Geese, it is the needy shore-shooter; for he, poor fellow, is so desirous to bag a few birds that he does not always consider whether they are within fair killing range of his gun. Who shall blame him? Not I, or indeed any other fowler who has a heart under his flannel jacket!

LETTER II

A FEW PREFATORY REMARKS ON THE HABITS OF WILDFOWL

Of all wild-birds the Swans, Ducks, and Geese are those which the fowler strives his utmost to obtain; and though the Plovers and Waders are of less size and value, he in no degree despises these, for not only is their plumage and shape beautiful, but they are excellent for the table; and, as they frequent our shores in large numbers, they sometimes afford sport when more highly-prized fowl cannot be secured.

SWANS AND WILD-GEESE

The Swans and Geese rest and sleep by night and seek their food by day. The Grey Geese very commonly feed on young crops, meadows, and stubbles, and often fly many miles at sundown to wild open land, or to the lonely sands or sand-banks of the coast, to repose in safety till dawn.

WILD-DUCKS

Wild-Ducks are represented by two well-defined classes. (1) The Ducks that procure their food on the surface of land or water, as may be convenient to them, and which are known as Surface-feeding Ducks. (2) The Ducks which habitually dive for their food, and obtain this nearly always *under* the water —usually on submerged banks strewn with small shellfish, and covered perhaps many feet deep by the tide. These latter are termed Diving-Ducks.

The Surface-feeding Ducks that in large or small numbers regularly frequent the British Islands are:

(1) The Sheldrake
(2) Wild-Duck
(3) Wigeon
(4) Teal
(5) Pintail
(6) Shoveller
(7) Gadwall
(8) Garganey

The Surface-feeding Ducks that on few occasions have been recorded in our Islands are:

(9) The Ruddy Sheldrake
(10) ,, American Wigeon

(11) The American Blue-winged Teal
(12) „ American Green-winged Teal.

The Diving-Ducks that in large or small numbers regularly frequent the British Islands are:

(1) The Pochard
(2) Scaup
(3) Long-tailed Duck
(4) Tufted Duck
(5) Golden-eye Duck
(6) Common Eider Duck
(7) Common Scoter
(8) Velvet Scoter
(9) Goosander
(10) Red-breasted Merganser
(11) Smew

The Diving-Ducks that on few occasions have been recorded in our Islands are:

(12) The Red-crested Pochard
(13) Ferruginous Duck
(14) Buffel-headed Duck
(15) Harlequin Duck
(16) King Eider
(17) Surf Scoter
(18) Hooded Merganser
(19) Steller's Eider.

SURFACE-FEEDING DUCKS

The Surface-feeding Ducks, though they may stretch their necks to grope in a shallow till their tails are alone visible, *never* entirely submerge their bodies to *swim* or *dive* after their food *under water*, as is the habit of the Diving-Ducks. Unlike the Diving-Ducks, they are nimble on shore, as their legs are well below the centre of their bodies, or as a sailor would say 'amidships'; for this reason Surface-feeding Ducks are able, when in search of food, to walk freely over the soft shores of the rivers and lakes, and with equal facility on the splashy marshes, and the flats of mud and sand that fringe the coast.

Surface-feeding Ducks are to be met with wherever they can find suitable food, as, for instance, on wet rushy fields, by the margin of sluggish rivers, and on the great stretches of ooze exposed by the ebb-tide.

The Surface-Ducks, Wigeon especially, are all by nature night-feeders; yet now and then, if pinched by hunger, as may occur in severe frost, or on a morning after their food was hidden by an exceptionally high tide the previous night, they may be observed feeding on the mud-flats during the day.*

* In severe frost, combined with on-shore gales, I have, on several occasions, seen Wigeon, to the number of two or three hundred, busily feeding *by day* on the short grass of pasture fields near the sea-coast.

Though SURFACE-DUCKS often feed by shovelling with their bills in shallow weed-grown water, they prefer to search for their food on land, or on the banks of sea-grass off the coast, taking into their mouths they scarce know what, yet retaining that which is acceptable and ejecting the remainder —a manner of support that is as easy to them by night as it would be by day.* When SURFACE-FEEDING DUCKS are noticed swimming and drifting about on sea, lake, or estuary, this shows their food is accessible within a short flight, and does *not* betoken the birds are feeding at the time, but that they are resting or sleeping after their exertions in seeking sustenance during the past night, and in anticipation of similar efforts during the night to

DIVING-DUCKS

To enable the DIVING-DUCKS to progress effectively under water, their legs are placed rather far back, near their tails. As a safeguard against the cold and wet incidental to their habits of diving, the plumage of these birds is extremely dense and glossy.

The DIVING-DUCKS are, from the position of their legs, comparatively slow and awkward in their movements on land, their natural element being the

* Nothing attracts Wild-Ducks more surely than rich meadows *after* a flood; the water brings the earthworms to the surface and drowns them, and food is thus offered which the Wild-Duck greatly fancies.

water; and as they are formed for diving, they obtain sustenance almost entirely below the surface. The Diving-Ducks can skim along a few inches above the bottom of an estuary or mere, using wings as well as feet in the act of propulsion, and thus they gather their food in the shape of either animal or vegetable matter. But this they cannot do at night in the brackish, tide-disturbed, or deep, water of the coast, and hence, with the exception of certain of their species that chiefly haunt inland lakes (as the Golden-eye, Pochard, and Tufted Duck), they feed only by day, and differ in this respect from Surface-Ducks.*

Among our Diving-Ducks we have what may be termed 'Sea-Ducks,' as the Eider, the Scoters, the Red-breasted Merganser, the Long-tailed Duck, the Scaup, and the Smew. These are essentially, during the autumn and winter months, birds that live at sea, though solitary specimens are occasionally blown far inland, when they are usually found in a state of exhaustion.

* Golden-eyes, Pochards, and Tufted Ducks, though they gather *most* of their food by day, *sometimes* feed by night. I have, for instance, in *bright* moonlight shot these three birds in *shallow* fresh-water lakes when they were engaged in feeding, for I have seen them diving, and in the case of the Pochards have found the weed in their mouths which they were busy plucking when they were killed. I have also occasionally shot the two last-named Diving-Ducks as they 'flighted' at dusk in company with common Wild-Ducks.

These 'SEA-DUCKS' are at home in the roughest water and on the stormiest coast, though their near relatives, the POCHARD, TUFTED DUCK, and GOLDEN-EYE, are most frequent on our fresh-water lakes and rivers, and find food therein to their fancy.

SEA-DIVERS

We have, besides the 'SURFACE' and DIVING-DUCKS, a grand race of SEA-DIVERS, 'THE GREAT NORTHERN,' 'THE BLACK-THROATED,' and 'THE RED-THROATED,' which, like the EIDER DUCK and the SCOTERS, revel in the sea, find their food near its shores, and seldom visit fresh-water, save in the nesting season.* These large SEA-DIVERS feed entirely on small fish, which throughout the day they incessantly dive for.

GREBES

The GREBES, though so much smaller in size, closely resemble in shape and habits the three large Divers just alluded to. GREBES, however, favour the fresh-water lakes and rivers more than the coast, save one or two of their kind that are chiefly met with on migration, and as winter visitors to our tidal estuaries.

GREBES procure their food by diving only, and are of all birds the most destructive to the young fish of a preserve.

* As the Great Northern Diver nests abroad, we very rarely see it on inland waters in our Islands, but the other two Sea-Divers are at home on the fresh-water lochs of the West and North of Scotland in summer.

WADERS

Of the WADERS that visit our coasts in spring, autumn, and winter; and in summer, the pools, rivers, and marshes, inland, there are many. They are a most restless tribe, and are constantly on the wing during the day and night in search of food, which they find on moist ground near shallow water, whether along the muddy banks of an estuary or creek, or as the tide ripples over the sand-flats of the sea-shore.

NOTE.—Though the DIVING-DUCKS can fly well to avoid danger, their power of flight does not equal that of the SURFACE-DUCKS, for the wings of the latter are long and powerful to enable them to voyage perhaps several miles in search of food every night. The DIVING-DUCKS rarely fly far, save when on migration, as they find their food under the water they rest on, their wings being short and stiff that they may be used as oars to propel their bodies below the surface. The SURFACE-DUCKS will, as a rule, rise at once on wing from the water or land when suspicious of disturbance. The DIVING-DUCKS will *at first* swim (*never*, in *winter*, dive) away from danger, though when too closely pressed they will take flight like any of the SURFACE-DUCKS, but will not travel to such a distance, or at nearly so high an altitude. As to DIVING-DUCKS, when *unwounded*, evading a charge of shot by diving at the flash of the gun, or the

motion of shouldering it, I have never seen such occurrences; they are but the idle tales of the ignorant.

The only web-footed wildfowl I know of which in winter, *without* being previously crippled by a gun-shot, *occasionally* dive from you rather than rise on wing to avoid pursuit, are the three large SEA-DIVERS and the GREBES.*

* Many of our Ducks, when with their young in the nesting season, or when their flight-feathers are moulted at midsummer and they *cannot* fly, are apt to seek safety by swimming or diving into shelter if disturbed. Crakes and Rails will at all times *run* into hiding rather than rise on wing.

LETTER III

A LIST, FOR READY REFERENCE, OF THE WILDFOWL THAT FREQUENT, OR HAVE OCCURRED IN, THE BRITISH ISLANDS

HERE are the British wildfowl arranged so that you may readily discover if they are Rare or Common with us, and if they nest in our Islands or abroad.

'Nests abroad' indicates the bird in question is not *known* to nest in the British Islands.

It may appear somewhat superfluous to add the words 'nests abroad' to the names of birds that never nest with us, or which only occasionally wander to our shores, but for the sake of uniformity I have decided to do so.

The two species of wildfowl whose nesting haunts have not been ascertained are,

THE BERNACLE GOOSE

AND

THE CURLEW SANDPIPER,

and though the young of the KNOT have been procured in the Arctic regions of America, yet the eggs of this bird are unknown.

THE ABUNDANCE OR SCARCITY, IN THE BRITISH ISLANDS, OF ANY BIRD NAMED IN THIS 'LIST OF WILDFOWL FOR READY REFERENCE' MAY BE JUDGED IN ACCORDANCE WITH THE STANDARDS GIVEN BELOW.

COMMON	Birds that are *numerous* (or else *generally distributed*) in all suitable haunts:—as the Golden and Green Plover, Brent Goose, Wild-Duck, Wigeon, or Dunlin.
FAIRLY COMMON	Usually *numerous* (or else not uncommon) *in the districts where they occur*, but *not generally distributed*:—as the White-fronted and the Bernacle Goose, Tufted Duck, Grey Plover, or Curlew-Sandpiper.
UNCOMMON	*Neither numerous nor generally distributed*:—as the Pintail, Shoveller, Stone Curlew, or Red-necked Phalarope.
RARE *	Foreigners that *occasionally* visit us:—as the Bittern, Ferruginous Duck, Spoonbill, or Avocet.
VERY RARE	Foreign waifs and strays whose visits are *quite accidental*:—as the Red-breasted, and the Snow Goose, Steller's Eider, Sociable Plover, or American Stint.

* As we so seldom obtain the Great Snipe, Spotted Redshank, Wood Sandpiper, and Temminck's Stint, I have, for this reason, treated them as 'Rare.' These four birds are, however, more or less *regular* visitors to us on migration, and should not, therefore (could it be avoided), be classed with the Foreigners that also occasionally, but *not* seasonally, wander to the British Islands.

SWANS (3)

MUTE SWAN .	Common in a semi-domesticated condition. Nests freely in the British Isles. (Also occurs in a 'wild' state.)
WHOOPER SWAN .	Fairly common winter visitor to a few parts of the coast. Nests abroad.
BEWICK'S SWAN .	Fairly common winter visitor to a few parts of the coast. (More generally distributed than the Whooper.) Nests abroad.

WILD GEESE (9)

BRENT GOOSE .	Common in winter on the coast. Nests abroad.
BERNACLE GOOSE .	Fairly common in winter on a few parts of the coast. Nests abroad (*locality unknown!*).
WHITE-FRONTED GOOSE	Fairly common in winter. Nests abroad.
GREY-LAG GOOSE .	Uncommon, except in a few parts of Scotland, and very-locally in Ireland. The only Wild-Goose that nests in a wild state in the British Isles.
BEAN GOOSE . .	Fairly common in winter. Nests abroad.

Pink-footed Goose	Fairly common in winter. Nests abroad. (Unknown in Ireland.)
Snow Goose *	Very rare. Nest abroad.
Red-breasted Goose	
Lesser White-fronted Goose	

SURFACE-FEEDING DUCKS (12)

(SHELD-DUCKS)

Sheldrake	Fairly common on sandy parts of the coast. Nests rather freely in the British Isles.
Ruddy Sheldrake	Very rare. Nests abroad.

Wild-Duck	Common. Nests freely in the British Isles.
Wigeon	Common on the coast in autumn and winter. (The most numerous of our winter Wild-Ducks.) Nests in small numbers in Scotland.
Teal	Common. Nests rather freely in parts of the British Isles.

* When the name of a bird is given in italics, this shows at a glance it is a *very rare* visitor to the British Islands.

PINTAIL . .	Uncommon winter visitor. Has been recorded as nesting in Scotland and Ireland on a very few occasions.
SHOVELLER . .	Uncommon. Nests sparingly in the British Isles.
GADWALL . .	Uncommon, save in Norfolk where it nests freely.
GARGANEY . .	Uncommon on migration. As a summer visitor nests very sparingly in South-Eastern England.
American Wigeon .	Very rare. Nest abroad.
American Blue-winged Teal .	
American Green-winged Teal .	

DIVING-DUCKS (19)

POCHARD . .	Fairly common on large inland waters. Nests rather freely in a few parts of the British Isles.
SCAUP DUCK . .	Common on the coast in autumn and winter. Nests abroad.
LONG-TAILED DUCK	Common on the coast of Scotland in winter. Nests abroad.
TUFTED DUCK .	Fairly common on large inland waters. Nests rather freely in a few parts of the British Isles.

Golden-eye Duck	Fairly common in winter, chiefly on fresh-waters. Nests abroad.
Ferruginous Duck	Rare. Nests abroad.
Red-crested Pochard	Very rare. Nest abroad.
Buffel-headed Duck	
Harlequin Duck	

(EIDER DUCKS)

Common Eider	Common on the coast of Scotland and Northumberland, where it nests freely.
King Eider	Very rare. Nest abroad.
Steller's Eider	

(SCOTERS)

Common Scoter	Common on parts of the coast in winter. A few pairs nest in the North of Scotland.
Velvet Scoter	Uncommon winter visitor. Nests abroad.
Surf Scoter	Very rare. Nests abroad.

(MERGANSERS)

Goosander	Uncommon. Nests rather freely in the Highlands of Scotland.

RED-BREASTED MERGANSER	Fairly common on parts of the coast. Nests freely in the West and North of Scotland, and less numerously in Ireland.
SMEW . . .	Uncommon winter visitor. Nests abroad.
Hooded Merganser	Very rare. Nests abroad.

SEA-DIVERS (4)

GREAT NORTHERN DIVER	Fairly common on the coast in winter. Nests abroad.
RED-THROATED DIVER	Fairly common on the coast. Nests in small numbers in the West and North of Scotland.
BLACK-THROATED DIVER	Uncommon (almost rare), save in the North and North-West of Scotland, where it nests sparingly.
White-billed Northern Diver	Very rare. Nests abroad.

GREBES (5)

GREAT CRESTED GREBE	Fairly common on large inland waters. Nests rather freely in parts of the British Isles.
LITTLE GREBE .	Common generally. Nests freely in the British Isles.

Sclavonian Grebe	Uncommon winter visitor, save on our North and East coasts. Nests abroad.
Black-necked Grebe	Uncommon winter and spring visitor. Nests abroad.
Red-necked Grebe	Uncommon winter visitor, chiefly to our East coast. Nests abroad.

CORMORANTS (2)

Black Cormorant . Green Cormorant	Common on many parts of our sea-board. Nest freely, but locally, on the coasts of the British Isles.

Gannet . . .	Fairly common on the coast after the breeding season. Nests in vast numbers on certain Scottish Isles, and much less numerously on a few Islands off the South-West coasts of England, Ireland, and Wales.

HERONS (6) AND BITTERNS (3)

HERON . . .	Fairly common. Nests rather freely in the British Isles.
NIGHT HERON .	Rare. Nests abroad.
COMMON BITTERN .	Rare. Nests abroad. (Less rare than the preceding.)
LITTLE BITTERN .	Rare. Nests abroad.
Great White Heron *Buff-backed Heron* *Purple Heron* . *Squacco Heron* . *Little Egret* . . *American Bittern* .	Very rare. Nest abroad.

STORKS (2)

White Stork . . *Black Stork* . .	Very rare. Nest abroad.

WHITE SPOONBILL Rare. Nests abroad.

Glossy Ibis . . Very rare. Nests abroad.

CRANES (2)

Crane . . .	Very rare. Nest abroad.
Demoiselle Crane .	

Coot . . .	Common. Nest freely in the British Islands.
Water-hen . .	

CRAKES AND RAILS (5)

Land-rail . .	Common summer visitor. Nests freely in the British Isles.
Water-rail . .	Fairly common. Nests sparingly in the British Isles.
Spotted Crake .	Uncommon. Nests sparingly in a few parts of the British Isles.
Little Crake . .	Very rare. Nest abroad.
Baillon's Crake .	

BUSTARDS (3)

Great Bustard .	Very rare. Nest abroad.
Little Bustard .	
Macqueen's Bustard	

Stone Curlew .	Uncommon summer visitor. Nests sparingly in a few parts of England.
Cream-coloured Courser . .	Very rare. Nest abroad.
Pratincole . .	
Dotterel . .	Uncommon as a summer visitor, and on migration. Nests sparingly in Scotland, and a few pairs breed in the North-West of England.

PLOVERS (10)

Green Plover .	Common. Nests freely in the British Islands.
Golden Plover .	Common. Nests freely in parts of the British Islands.
Grey Plover .	Fairly common on the coast in autumn and spring, less numerous in winter. Nests abroad.
Ringed Plover .	Common on the coast. Nests rather freely in the British Islands.
Kentish Plover .	Uncommon summer visitor. Nests very sparingly on the South coast of England.

Lesser Golden Plover
Sociable Plover .
Kildeer Plover . } Very rare. Nest abroad.
Little Ringed Plover
Caspian Plover .

TURNSTONE . . Fairly common on the coast in autumn and winter. Nests abroad.

OYSTER-CATCHER . Common on the coast. Nests freely in Scotland, sparingly on the coasts of the rest of the British Islands.

AVOCET . . . Rare. Nests abroad.

Black-winged Stilt . Very rare. Nests abroad.

PHALAROPES (2)

GREY PHALAROPE . Uncommon visitor, chiefly on migration, but numerous some years. Nests abroad.

Red-necked Phalarope	Uncommon summer visitor to the Northern and Western Isles of Scotland, where a few nest. Also uncommon on the coast on migration.
Woodcock . .	Common. Nests rather freely in the British Islands.

SNIPES (4)

Common Snipe	Common. Nests rather freely in the British Islands.
Jack Snipe . .	Common in winter, though less numerous than the preceding. Nests abroad.
Great Snipe .	Rare visitor on migration. Nests abroad.
Red-breasted Snipe	Very rare. Nests abroad.
Curlew . .	Common on the coast. Nests freely in parts of the British Islands.

	the Northern Isles of Scotland.
Eskimo Whimbrel .	Very rare. Nests abroad.

GODWITS (2)

Bar-tailed Godwit	Common visitor to the coast on migration, and fairly common on a few parts of the coast in winter. Nests abroad.
Black-tailed Godwit	Uncommon visitor to the coast on migration. Nests abroad.

SHANKS (4)

Redshank . .	Common on the coast. Nests rather freely in parts of the British Islands.
Greenshank . .	Fairly common visitor on migration. Nests sparingly in the Hebrides and in the Highlands of Scotland.
Spotted Redshank	Rare visitor on migration. Nests abroad.
Yellowshank . .	Very rare. Nests abroad.

SANDERLING .	Fairly common visitor to the coast on migration. Nests abroad.

SANDPIPERS (11)

COMMON SANDPIPER	Common summer visitor. Nests freely in parts of the British Islands.
GREEN SANDPIPER .	Uncommon visitor on migration. Nests abroad.
PURPLE SANDPIPER	Fairly common in winter on rocky parts of the coast. Nests abroad.
CURLEW SANDPIPER	Fairly common visitor to parts of the coast on migration. Nests abroad (*locality unknown!*).
WOOD SANDPIPER .	Rare visitor on migration. Nests abroad. (Nest once recorded in the British Islands.)
Bonaparte's . .	Very rare. Nest abroad.
Pectoral Sandpiper .	
Broad-billed . .	
Sandpiper . .	
Buff-breasted . .	
Sandpiper . .	
Bartram's . .	
Sandpiper . .	
Solitary Sandpiper .	

Dunlin . .	Common on the coast in autumn and winter. (The most numerous of our shore-birds.) Nests rather freely in the North of England, and in Scotland.
Knot . . .	Common on the coast in autumn and winter. Nests abroad (*eggs unknown!*).

STINTS (3)

Little Stint .	Fairly common visitor to parts of the coast on migration. Nests abroad.
Temminck's Stint	Rare visitor on migration. Nests abroad.
American Stint .	Very rare. Nests abroad.
Ruff . . .	Uncommon visitor on migration. Nests very sparingly in the South-East of England.

I have included in the foregoing list a number of birds that would scarcely be called wildfowl by the *fowler*, as they are not worth killing for food. As, however, many of these are frequently to be seen in the haunts of wildfowl proper, which they often closely resemble in their habits, and as they are, besides, all wildfowl from a *naturalist's* point of view, I thought it best not to omit them. I allude to

The Eiders
,, Scoters
,, Mergansers
,, Great Northern Diver
,, Red-throated Diver
,, Black-throated Diver
,, Grebes
,, Cormorants
,, Gannet
,, Herons
,, Bitterns
,, Spoonbill
,, Ibis
,, Oyster-catcher
,, Avocet
,, Stilt
,, Storks
,, Cranes

I have also granted space to a few species, such as, for instance, the Bustards, that do not associate with Geese, Ducks, or Marsh Birds; but which, like the Stone Curlew or the Woodcock, are in fact wildfowl, and would be highly prized by the fowler did he chance to obtain them.

In this long array of 133 birds that are common to or have 'occurred' in our Islands (of which only 45 are *known* to nest with us), it is worth remark how few of them may, from their presence throughout both the winter *and* summer, be called RESIDENT BRITISH WILDFOWL.

(see next page.)

Common, and Fairly Common, RESIDENT BRITISH WILDFOWL:

1. SHELDRAKE
2. WILD-DUCK
3. POCHARD
4. TUFTED DUCK
5. TEAL
6. RED-BREASTED MERGANSER
7. EIDER DUCK
8. BLACK CORMORANT
9. GREEN CORMORANT
10. GREAT CRESTED GREBE
11. LITTLE GREBE
12. GANNET
13. HERON
14. COOT
15. WATER-HEN
16. WATER-RAIL
17. GREEN PLOVER
18. GOLDEN PLOVER
19. OYSTER-CATCHER
20. CURLEW
21. COMMON SNIPE
22. WOODCOCK *
23. REDSHANK
24. RINGED PLOVER
25. DUNLIN

Though these 25 birds nest with us more or less freely and may be termed either Common, or Fairly Common, Residents in one part or another of our Islands, yet nearly all of them are very largely augmented in number during the autumn and winter by migrants from abroad, as, for example, the WILD-DUCK, POCHARD, TUFTED DUCK, TEAL, CURLEW, WOODCOCK, SNIPE, DUNLIN, and the GREEN and GOLDEN PLOVER. The chief exceptions being the WATER-HEN, EIDER DUCK, GANNET, CORMORANTS, COOT, and HERON.

* I include the Woodcock, as this bird, owing to careful protection, nests more numerously every year in the British Islands.

Besides the birds given on the opposite page we have some more or less well-known winter wildfowl, *very few*, comparatively, of which are Resident, and nest in the British Isles.

In this class are:

26. THE GREY-LAG GOOSE
27. ,, PINTAIL *
28. ,, SHOVELLER
29. ,, WIGEON
30. ,, GADWALL †
31. ,, SCOTER
32. ,, GOOSANDER
33. ,, RED-THROATED DIVER
34. ,, BLACK-THROATED DIVER

Though the WIGEON, SHOVELLER, GOOSANDER, and the RED-THROATED DIVER nest more freely in our Islands than any of the other birds in *this* list, yet from their general scarcity in *summer* I cannot include them with even the Fairly Common Resident British Wildfowl.

We also have a few wildfowl that we seldom or never see in *winter*, but which chiefly visit us as they migrate to distant countries in the spring and autumn, only a small proportion of their number remaining, as *summer visitors*, to nest in the British Islands. Among these the RUFF, KENTISH PLOVER, GARGANEY, and the RED-NECKED PHALAROPE, are the least numerous, the COMMON SANDPIPER and the LAND-RAIL the most abundant. The others breed sparingly in our

* The Pintail hardly merits a place here, as it has so rarely been proved to nest in our Islands.

† The Gadwall I include in this list as, outside Norfolk and Suffolk, it is scarce and very seldom nests, though in parts of the counties named it is common, and may be considered to some extent semi-domesticated.

Islands, and are most often seen therein during their passage north in April and May to their ordinary nesting quarters, and again as they pass in August and September on their return journey with their young. At this latter season the birds of their kind that have nested with us then join these migratory visitors as they travel southwards to avoid the cold of winter.*

I allude to:

35. The Garganey
36. ,, Stone Curlew
37. ,, Whimbrel
38. ,, Ruff
39. ,, Spotted Crake
40. ,, Land-rail
41. ,, Dotterel
42. ,, Kentish Plover
43. ,, Red-necked Phalarope
44. ,, Greenshank (a few winter with us)
45. ,, Common Sandpiper

Note on the relative Merits of Wildfowl for the Table.

I will here refer to the common error that Wild-Duck, Wigeon, or Teal, if killed on salt-water, are

* The Stone Curlew and the Kentish Plover are, however, strictly *summer visitors* and, unlike the other birds named in the above list, do *not* occur as migrants to and from the North.

'fishy' when served at table. This is impossible, as no Surface-Duck ever feeds on fish, or could even catch a fish.

No doubt the Diving-Ducks are, as a group, unfit for food; for *these*, if shot on the *coast*, have probably existed on shell-fish. It is worth notice, too, that a Diving-Duck often has a rancid taste from the amount of fat which underlies the skin, and which acts as a protection from the cold of the water it passes so much of its life in.

The most tasty of the Ducks to eat is the Teal, for this little bird is nearly always fat and juicy (I have rarely seen a Teal in poor condition).

The Wigeon I do not relish. The Pintail is admirable, and in a less degree so are the Wild-Duck, the Gadwall and the Shoveller.

The Diving-Ducks (excepting the Pochard and Tufted Duck, which are both excellent when killed on *fresh-waters*, where they feed on *sweet* weed) are detestable.

I would as soon eat a Gannet or a Seagull as a Scoter or Merganser.

Any of the Grey Geese, when young, are fit to make soup of, and savoury soup too, but a well-fed White-fronted Goose is good at any age, if roasted.

A Brent Goose, if you hang him a fortnight, is delicious, an opinion shared by the many friends I have sent Brent to.

Nearly all the shore-birds are capital eating, and

The Best Way to Cook a Wild-Goose

Place the Goose in a large saucepan with a *very* close-fitting lid, put in with the bird two claret glasses of brandy and three table-spoonfuls of mixed salt and pepper. Lay a piece of fat bacon over the breast of the Goose.

If an adult bird it may take 1½ hours to cook it properly.

* A fat Golden Plover is quite as good eating as that much over-rated bird the Woodcock. In my experience (I may be unlucky) a Woodcock is usually served in too raw a state to eat with pleasure, or in too tough a condition to chew with comfort.

WHOOPER SWAN MUTE SWAN BEWICK'S SWAN

LETTER IV

SWANS

Wild-Swans do not frequent the British Islands in any number unless severe frosts prevail in Northern Europe, yet they are regular winter visitors to our tidal and inland waters—the Whooper being chiefly killed on rivers and lakes, and Bewick's Swan on, or near, the coast.*

When fairly on wing I believe Swans fly faster than Ducks or Geese, but their immense bulk makes it difficult for the eye to realise their great speed. I know nothing more melodious than the rhythmical beat of a Swan's wings:—a wild and tuneful sound that can be heard for nearly a mile on a calm frosty day.

To shoot a Swan with the shoulder-gun, as the bird flies past, aim well forward under the wing, and as near where the wing joins the body as you can; for the feathers are here penetrable, and the vital parts acces-

* Because the Whooper often wanders to preserved waters inland, where it is accessible to the shoulder-gun, it has been misjudged a more numerous visitor to the British Islands than Bewick's Swan; but this is not the case, though fewer of the latter birds are killed, it is true, their habit of frequenting the sea-coast making them less easy of approach by the fowler than the 'Whooper.'

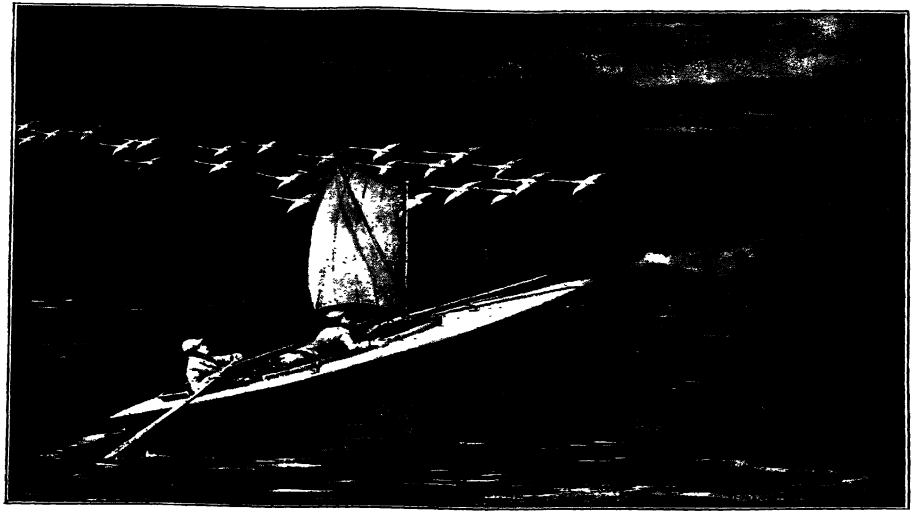
sible to medium shot, while the head and neck are not only small marks to aim at, but even if you strike these you are not likely to do so with sufficient pellets to kill so large and powerful a bird. If a Swan is on the water you have *then* no option but to aim for the head, as shooting at a Swan's body, with the wings folded, is similar to firing at a bolster, for all the damage you will do!

Should you meet with Swans when you are afloat with a stanchion-gun, direct your aim just clear of the humps of their backs, so as to send the charge well among the heads and necks of the birds, else you will probably fail to bag any.

If you see Wild-Swans resting on land, or on a pool of water near the sea-shore, as they sometimes do after easterly gales, and you carry a shoulder-gun, conceal yourself well *upwind* (the stronger the wind the better), wait patiently, and *when* the birds spring they are certain to *at first* fly against the breeze—that is *towards* you—and may perhaps afford a fair shot. (Swans cannot lift their heavy bodies clear of the ground or water, unless they head the wind *on rising*.)

Remember, however, that Swans are huge birds, a fact which encourages at all times the idea that they are much nearer when on wing than they really are: for this reason, if they happen to shape their course directly for you, remain motionless till they are passing straight overhead, and *then* salute them.

If Swans, when settled, do *not* appear inclined to fly,

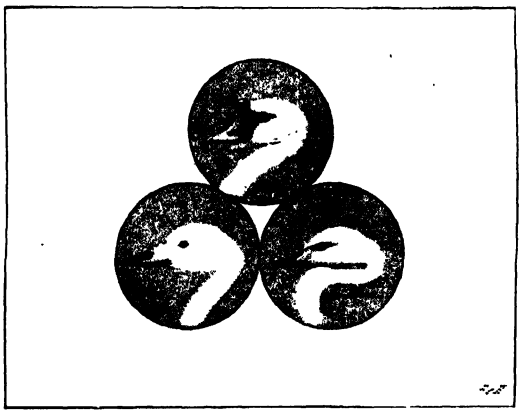


A CLEAN MISS AT THE SWANS BY A NOVICE

'Swans is big burds, sir, and looks a deal nigher than they be when a gentleman fires at 'em

and you have a companion, *you* should hide upwind, and *he* should carefully stalk *round* the birds till he can show himself suddenly *behind* them downwind; he may then quite possibly drive them right over your

HEADS OF SWANS



THE MUTE

THE WHOOPER THE BEWICK

gun. I have shot both WILD-SWANS and WILD-GEESE with great success after this fashion.

When Swans are swimming on a wide estuary or on the sea, it is still more difficult to estimate their distance than when they are flying by you over land. I have known a novice in stanchion-gun shooting to

blaze off at a couple of hundred yards at Wild-Swans, and afterwards declare the birds were within easy range of his big-gun. (See sketch facing previous page.)

The British Swans are:—'The Mute,' the 'Whooper,' and 'Bewick's Swan.' The Mute is easy to tell from the others of its genus; and the two latter, or our real Wild-Swans, need never be confused, especially if they are in the *white* plumage of adult birds, as their difference in weight and size is so marked.*

THE MUTE SWAN

This is the tame and familiar bird of our ornamental waters, and can be identified by the *black protuberance* above the base of its bill, as well as by the *black* patch between the bill and the *eye*, as shown in the uppermost figure of the sketch on page 45.

Besides this, the upper bill of the Mute Swan is *orange red* in colour (except the edges, nostrils, and tip, which are *black*), and it lacks the couple of inches

* The so-called Polish Swan is merely a variety of the Mute Swan The adult males and females of the Swans are respectively similar in plumage and markings, and there is no difference between their summer and winter dress.

of black at the end, which is present on the bill of each of the two WILD-SWANS next to be described.

The MUTE SWAN, though domesticated in our Islands, breeds under purely wild conditions in several portions of Europe, notably in Central and Southern Russia and along the shores of the Black and Caspian Seas, where it is as absolutely a wild-bird as is the WHOOPER or BEWICK'S SWAN when these visit our shores.

The MUTE SWAN has no call note—hence its name—and is the heaviest of the species, a fine male weighing 28 lbs. to 30 lbs. (I once killed one of 32 lbs.), and measuring from tip of bill to end of tail 4 ft. 10 in. to 5 ft. 2 in.*

I have shot MUTE SWANS on the coast, in northerly gales and hard frost, that, judging from their shyness, had evidently but lately journeyed from a foreign country. As this species nests in a wild state no farther from us than Denmark, there is little reason to suppose that *all* the MUTE SWANS which appear on the shores of the British Islands are necessarily tame ones, and truants from inland preserves.† The MUTE SWAN may be known at a long distance by its gracefully

* I have heard the Mute Swan give a low hiss, as well as a guttural sound, but *only* when guarding its nest or young.

To prevent a cross old Swan from continually chasing the other wildfowl of a preserve, catch him, and stamp out holes with a wad punch in the webs of his feet; he will be none the worse for this, but his furious pace will be much lessened.

† There is no doubt the Mute Swan is frequently met with in the British Islands in severe winters as purely 'wild' as the Whooper' or 'Bewick.'

curved neck, while the WHOOPER and BEWICK'S SWAN, unless when feeding or sleeping, carry *their* necks straight and stiff, after the manner of WILD-GEESE.

WHOOPER SWAN

Local names.—WILD-SWAN, WHOOPER, WHISTLING SWAN, GREAT SWAN.

The WHOOPER is said to have nested in the Orkneys some hundred-and-twenty years ago, but now only breeds abroad, chiefly north of the Arctic Circle. It nests in Iceland, Norway, Sweden, Finland, Lapland, Northern Russia, and Siberia. The huge nest of the WHOOPER is generally placed on an island in fresh-water, or in a desolate morass, and is constructed of coarse vegetable matter. The eggs are *whitish*, and usually five in number.

The WHOOPER is considerably the larger of our two WILD-SWANS, and, in my experience, certainly the rarer. I have seldom seen a score of these birds together in our Islands south of the Tweed.*

The WHOOPER is of the same length as the MUTE SWAN, or about 5 ft., but of a finer shape and, in

* Both the 'Whooper' and Bewick's Swan are fairly common, in winter, to the lakes and shores of some of the Islands of the North of Scotland, though, perhaps, more numerous on migration in late autumn and early spring than in the cold season of the year.

consequence, of a lighter weight. The heaviest WHOOPER I ever killed scaled 25½ lbs., but an ordinary adult male might average from 21 lbs. to 22 lbs., an adult female 18 lbs. to 19 lbs.

The bill of the WHOOPER is four inches in length, and its basal half is *orange yellow*, as indicated by the *white* patch in the figure of the head of this bird on p. 45. The rest of the bill (from its tip to the nostrils) is *black*.*

The cry of the WHOOPER resembles a deep-toned whistle, rather than the call 'Hoop! Hoop!' from which its name is said to be derived.

It is a bird that is easily tamed, as the following anecdote will show. A few years since fourteen WHOOPERS alighted one winter evening in a fallow field near my residence; the ground was wet after a thaw; during the night frost set in again, and when the Swans rose on wing at dawn to continue their flight, one of them was unable to fly from the weight of the lumps of clay frozen to its feet when at roost. This bird was easily captured. I clipped its wings and placed it on some ornamental water, and in two days it swam to within three yards of me to feed on slices of bread, and it is still in fine feather and very tame.

* The triangular patch of orange yellow that covers the base of the upper bill of the Whooper commences at the eyes, and terminates in two points—one below each nostril, and in line with the extremity of that orifice.

BEWICK'S SWAN

Local names.—LITTLE WILD-SWAN, LESSER SWAN.

This Swan is a native of Arctic Eastern Europe, and Siberia (from the Island of Kolguev to probably as far east as Behring Straits), and is more numerous on the coasts of the British Islands than the WHOOPER. The nest of BEWICK'S SWAN has seldom been found, and resembles in construction that of the WHOOPER.*

In severe weather I have, on several occasions, seen herds of from one to two hundred BEWICK'S SWANS on a few of the lakes and estuaries of the west of Ireland that lie near the sea, and now and then gatherings of from a score to fifty on the east coast of England and Scotland.

An adult male BEWICK'S SWAN is nearly a half less in weight than the adult WHOOPER, and a foot shorter, its length being usually an inch or two under or over 4 ft. and its weight about 13 lbs. (the largest I ever killed was 15 lbs.), which is several pounds less than the smallest full-grown WHOOPER I have seen. The inferior size of BEWICK'S SWAN, whether it be a female, a young, or an old bird, at once defines it from the adult or immature of the WHOOPER; and its head and bill are smaller and shorter, the latter being only three inches

* In the summer of 1894 Mr. Trevor-Battye found Bewick's Swan nesting in small numbers on the Island of Kolguev, off the coast of Arctic Europe.

in length, though, like the WHOOPER, its terminal half is *black*. The outer margins of the patch of *orange yellow* on the bill of BEWICK'S SWAN are, however, somewhat rounded, and the patch itself is not nearly so large as the one of the same colour on the bill of the WHOOPER. These *orange* patches are constant marks of distinction between either of the two WILD-SWANS and the MUTE SWAN.

A characteristic difference between the WHOOPER and BEWICK'S SWAN is that the *orange* on the base of the bill of the latter bird terminates *before* the nostrils, that is to say between the nostrils and the head, and in the WHOOPER *below* the nostrils, and *in line with*, their extremity.

BEWICK'S SWAN has a loud sonorous call that differs from the melodious and subdued note uttered by the WHOOPER.

Swans in their first year are *grey* in colour, and of course smaller than the purely white adult birds. In their *second* winter they obtain a much lighter plumage than in their *first* (though *not snow white*), and are then nearly as heavy and large as their parents.

A young or *grey* BEWICK'S SWAN in the winter of its first year will weigh 10 lbs., in its second winter 12 lbs. The WHOOPER will weigh in these stages 15 lbs. and 17 lbs.

Both the young of the WHOOPER and of BEWICK'S SWAN have their bills *flesh-coloured* till they are adult,

when this dull hue is replaced by the *orange* basal patch and *black* outer half.

The illustration facing p. 43 will enable you to form a good idea of the difference in size and form of the three Swans.

If you kill a *young* Swan, and by reason of the incomplete markings on its bill are in doubt as to whether it is a 'wild' or a 'tame' one, you should carefully observe the *shape* of the *head*.

The head of the WHOOPER or of BEWICK'S SWAN is long and wedge-shaped, the forehead low and sloping gradually up from the bill.

The head of the MUTE SWAN is comparatively short and round, and its forehead is high and prominent (see p. 45).

LETTER V

WILD-GOOSE-SHOOTING WITH THE SHOULDER-GUN

I HAVE, with care and patience, tried, I honestly believe, every imaginable device for obtaining shots at WILD-GEESE with the shoulder-gun; including tame Decoys tethered to the ground; stalking-horses natural and artificial; pits dug in the feeding *and* at the sleeping haunts of the birds; and little huts of straw, with holes in their tops to aim through, built in their line of flight. But the WILD-GOOSE is a precious wary fowl, and I have long since discarded all such contrivances as a mere waste of time and trouble.*

* An amusing incident happened to me a few winters ago on the coast. I had noticed on two or three occasions that a string of carts and horses, employed for loading seaweed, passed on their way home across the sands at dusk within a very long shot of a small gaggle of Grey Geese. The horses and carts when returning shoreward were roped together, and their owners walked with the foremost cart, chatting and smoking.

I at once obtained a cart, had it filled with seaweed, and covering myself up with the latter, I drove the horse with one hand, and held a large shoulder-gun, loaded with swan shot, in the other. I then joined, as the hindmost, the procession of carts as they journeyed home;— all passed the geese without the birds taking any notice, till the cart immediately before me in the line came abreast of the birds, but, as it did so, flame and smoke shot out from among its load of weed, three of the geese fell dead, and the rest flew away.

The fact was, the same idea that had struck me had also occurred to a local fowler, though we had never met.

Big and simple though WILD-GEESE appear when viewed through a telescope at a distance of a mile, as they sit on the sand-banks or feed in the centre (always in the *centre*, by the way) of large fields, yet they possess so great a suspicion of any object in the least degree unusual that they will shun its vicinity by instinct.

However carefully the fowler builds his shelter of boughs or digs a pit to hide in, 'tis odds there is something about them that at once attracts the searching eye of the WILD-GOOSE, and warns the bird of a possible danger.

The well-known pictures that represent a fowler firing within easy gun-shot at large numbers of WILD-GEESE through a hole in the side of a canvas imitation of a horse or cow, as he carries this before him, are ludicrous, though the imagination of the artist is to be commended.

A couple of hundred years ago WILD-GEESE were doubtless not quite so gun-shy as they are now, for the inferiority of the destructive weapons of those times insured them a freedom from useless disturbance.

In the present day you might as well, in my experience, endeavour to drive a coach and four up to a gaggle of WILD-GEESE as try to approach them with an *artificial stalking-horse*, whether the latter be in the form of a horse, cow, or—donkey! notwithstanding the seductive descriptions of success therewith given in some modern works on fowling.

As to digging a pit in the field or marsh frequented by the geese, I have tried this experiment often enough. A shot or two I have, it is true, sometimes obtained, though never a successful one, as, whether the birds are taken as they fly overhead or after they have alighted, it is well-nigh impossible to handle a gun in the cramped position the proper concealment of a pit dug for WILD-GOOSE-shooting entails. Besides this, geese will for a long time forsake any land where they have been fired at within close range while unsuspectingly feeding or resting.

The best method of shooting WILD-GEESE with the shoulder-gun, is for the fowler to hide behind some *natural* shelter in their line of flight, either as the birds fly *to* their feeding grounds or as they return *from* these to the place they select for resting and sleeping.

If *undisturbed*, WILD-GEESE will fly just *after* dawn, as regular as the clock, from their sleeping quarters to their feeding ground, and almost to the minute will they return shortly *before* dusk from where they feed to their usual resort for passing the night.*

Now bear particularly in mind that, if *disturbed*—I mean driven away—the geese will act in a precisely

* In exceptional weather, such as violent gales with frost and snow, Wild-Geese will not merely flight in gaggles, as is their usual custom at dawn and dusk, but will be on the move throughout the day in small numbers to seek the food or rest then denied them by the elements—a *grand* opportunity for the fowler who has *previously* learnt their line of flight.

similar manner. Should you, for instance, frighten the birds when they are feeding, they will wing their way straight to their usual haunts for the night; if you drive them from these, away they go back to their feeding grounds again.

From this it will be seen you have two alternatives for shooting Wild-Geese as they flight—

(1) To shoot the birds at dawn and dusk as they fly *naturally* to and fro between the places they rest and feed at.

(2) To shoot them during the day as they are *driven* by an assistant from the one resort to the other.

The *wind* is your great aid in all Wild-Goose-shooting with the shoulder-gun. Without wind, and plenty of it, you will have little chance of sport, for in calm weather the birds will fly high out of shot, though in a *gale* that is *against* their flight they will skim *low* over the land and possibly well within range of your gun.

Should you on a stormy day see Wild-Geese feeding or resting, creep as near to them as you can without risk of discovery, and conceal yourself behind some shelter, as a wall, hedge, or bank, but do not fail to take up a position so that the wind blows straight from you to the birds. When the Geese rise of their own accord, or are driven up by an assistant, you then have everything in your favour, for they are sure to fly fair against the wind for some little distance,

even though the point they intend to make for eventually lies in an opposite direction.

If you have an assistant, he should, if possible, stalk round the Geese, and suddenly show himself downwind *behind* the birds—that is, when you and the Geese and he are in line. You then have every likelihood of a shot, should the wind be strong and the birds be sitting within a couple of hundred yards or so.

Though driving Wild-Geese to the gun as here related is occasionally a very successful mode of shooting them, still, if you can discover the *natural* line of flight of the birds and are able to find concealment in their course as they fly *low against a strong wind* between their usual resorts of rest and food, it is a better plan, and one less likely to scare them out of the district.

It often happens that the flight of the Geese is downwind, as of course you cannot, do what you will, always arrange your position so that the birds head the wind as they fly towards you. In such case you will have little chance of a shot, unless in a snow-storm or in a thick fog. When flying *with* the wind, however strong it be, Wild-Geese can pass over as high as they please and will generally keep far out of range; but if you have the luck to be out in a heavy snow-storm or in a fog, you will find the birds are apt to pass over, even downwind, at quite a low altitude rather than lose sight of the ground beneath them. I have killed a

great many WILD-GEESE in snow-storms and in fog with scarcely any wind at all.*

I have now described the *principles* of shooting WILD-GEESE with the shoulder-gun, but there is a good deal to find out for yourself. You will have to note most carefully the movements of the Geese by day and by night, where they *feed* and where they *sleep*, and the direction they commonly take when passing from the one resort to the other. The line of flight of the Geese from their feeding grounds to their sleeping quarters may be quite different from their line of flight when travelling from their sleeping quarters to their feeding grounds; they will also vary their flight in accordance with the wind and tide.

If the wind is strong they will fly directly to and from their haunts; if the wind is light they seem to take pleasure in wheeling about in the sky over the spots on which they intend to alight.

If the Geese shift their quarters for obtaining food, or should the tide at night happen to cover the banks

* On a great stretch of marsh-land I have the shooting over in the north of England (which is frequented by many hundred Pink-footed Geese), I have enjoyed good sport during the past winter (1896) by employing a red setter to act as a decoy. If, when walking after Snipe, I observed Geese flying, I found that by crouching in the sedge and then sending my setter to run free, the birds would frequently change their line of flight, turn towards the dog, and come sailing down, with wings stiffly set, just above him. On these occasions their attention seemed riveted to the animal that aroused their curiosity, to the entire neglect of their usual caution. The Geese I killed in this manner were, however, invariably young ones.

they generally sleep on, they may then feed and sleep a mile to one side or other of their usual haunts, and their line of flight will vary accordingly. All these changes must needs be noted and acted on. You may rest assured that WILD-GEESE leave nothing to chance, and that, if you can only ascertain it, there is invariably a *reason* for their change of flight. Study to learn this reason and you will be rewarded with success.

In the foregoing remarks I allude to the GREY GEESE, all of which habitually feed inland—namely, the GREY-LAG GOOSE, the BEAN GOOSE, the PINK-FOOTED GOOSE, and the WHITE-FRONTED GOOSE.

The shore-frequenting or BERNACLE GOOSE I have rarely shot when flighting, but more often on salt-marshes or with the stanchion-gun on the tide. The BRENT GOOSE is essentially the quarry of the stanchion-gun shooter, as this bird *very* rarely leaves the coast, though I have in *rough* weather bagged a good many with the shoulder-gun as they flew over the *small* islands or *narrow* belts of sand-hills that happened to lie between the sea and some estuary the birds daily visited for food, when the banks therein were exposed at low-water.

The best WILD-GOOSE-shooting with the shoulder-gun I know of was enjoyed by my friend Mr. J. Fletcher, of Saltoun, N.B., who, a few years ago, at Margam, on the shores of Swansea Bay, obtained in

one day to his own gun sixty-three WHITE-FRONTED GEESE, and again in the same winter fifty-four on another day. These fine bags were made in gales of wind and snowstorms, and Mr. Fletcher killed the Geese as they flew in from the sea to their feeding grounds. The Geese were disturbed off the fields (by keepers) as soon as they alighted, and, as they found the sea, on returning to it, too rough to rest on in comfort, they were continually flighting inland therefrom in small numbers at a time.*

WILD-GOOSE-SHOOTING AT BERKELEY

Perhaps the most historical WILD-GOOSE-shooting in our Islands is at Berkeley Castle, where the records of this sport have been accurately kept for over fifty years.

The Geese at Berkeley have from time immemorial frequented certain large, low-lying, grass fields near the estuary of the river Severn, and they appear annually in numbers varying from two to as many as three thousand or more.

The BEAN and PINK-FOOTED GEESE come first, usually between the 15th and 20th of September, but these nearly all disappear in the last week of November.

* From five to six thousand 'White-fronted Geese' are sometimes to be seen at Margam. The birds arrive in November, and as they have a stretch of eight miles of suitable feeding ground near the sea, are carefully protected and seldom shot at, their numbers have greatly increased in recent years.

A WILD GOOSE DRIVE AT BERKELEY

There are then practically no Geese till the first week of December, when the White-fronted Geese arrive, and remain till March.*

The large fields the Wild-Geese haunt at Berkeley have shelters (formed of hurdles interwoven with straw) erected near the hedges and banks that surround them, for the shooters to hide behind. These shelters are so positioned that when the Geese are driven by a line of keepers off the fields the birds fly over them *en route* to the Severn. Sometimes the Geese fly off to other fields instead of to the river, in which case the shooters, perhaps six or seven in number, move to another line of shelters, over which the Geese are then driven by the keepers. It has always surprised me at Berkeley that the Geese, when they fly to the Severn after a drive, should in an hour or so return to their feeding grounds in the fields and thus have to submit in a short time to another drive over the guns, five or six 'drives' being sometimes accomplished in one day. (See illustration opposite.)

I never experienced a more exciting form of sport than this goose-driving at Berkeley. The roar of their wings as the birds rise off the ground is like thunder, and the volume of sound emitted by a chorus of two or three thousand Geese as they fly over your shelter is bewildering, and makes it no easy matter, as you anxiously grasp your gun, to select a couple of victims from the mass of grey forms sweeping so rapidly across the sky.

* At Berkeley the Pink-footed Geese freely associate with the Bean Geese.

LETTER VI

WILD-GEESE *

THERE are six species of WILD-GEESE that frequent the British Islands, and which are always with us during autumn or winter in large or small numbers. These are—

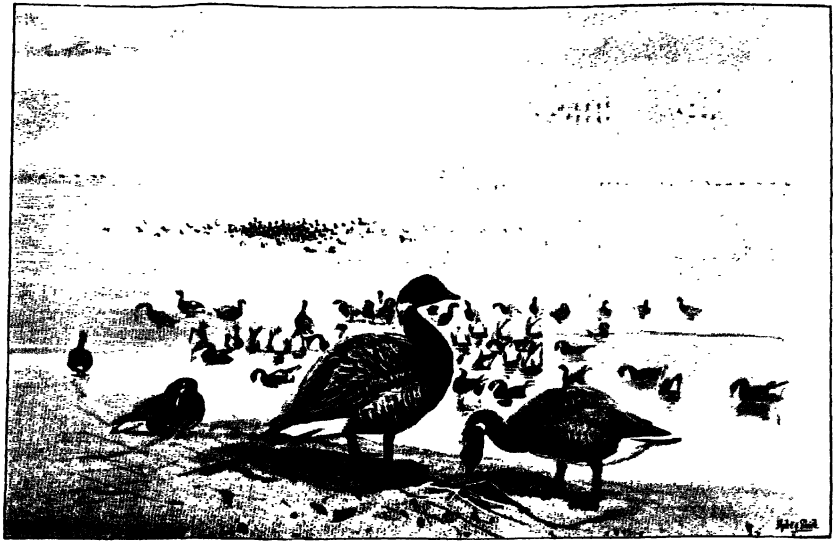
THE GREY-LAG GOOSE
,, BEAN GOOSE
,, PINK-FOOTED GOOSE
,, WHITE-FRONTED GOOSE
,, BERNACLE GOOSE
,, BRENT GOOSE

Such very occasional wanderers to our shores as

THE SNOW GOOSE
,, RED-BREASTED GOOSE
,, LESSER WHITE-FRONTED GOOSE

I will not now allude to further than to name.

* The adult males and females of all the Wild-Geese are respectively similar in plumage, and there is also no difference between their summer and winter dress.



BRENT GEESE ON A BANK AT SEA

Our six well-known WILD-GEESE may be classed as follows :—

(1) The Geese that habitually feed inland;

(2) The Geese that only feed near the sea or its estuaries;

(3) The Geese that never, or *very* rarely, quit salt-water, and only feed on tidal banks or on drifting weed at sea.

The first class comprises the four GREY GEESE, or

THE GREY-LAG GOOSE
,, BEAN GOOSE
,, PINK-FOOTED GOOSE
,, WHITE-FRONTED GOOSE

The second class consists of

THE BERNACLE GOOSE,

as this bird is usually to be seen feeding on the verge of tidal water.

The third, or marine, class consists of

THE BRENT GOOSE.

Though *all* the WILD-GEESE that haunt our Islands may at times be observed washing and resting on the water, or mud and sand-banks, of our estuaries, it will be noticed their selection of a locality for feeding differs considerably. Under unusual conditions of

weather, such as deep snow and hard frost, WILD-GEESE will, however, seek for food wherever they can obtain it, whether on land or sea, always excepting the BRENT GEESE, as these birds *very rarely* leave salt-water, and never feed on land other than the *Zostera*-covered ooze-banks exposed by the ebb-tide. In *exceptionally* severe and stormy weather one or two BRENT are now and then obtained on rivers at a distance from the coast.*

THE GREY-LAG GOOSE

Local name.—GREY GOOSE or LARGE GREY GOOSE.†

Length.—34 to 35 inches.

Weight.—9 lbs. to 10 lbs.; a young bird, in its first winter, 7½ lbs. to 8 lbs. (The largest I ever shot weighed 11 lbs.)

Markings.—The adults have a narrow margin of

* In a hard frost about six or seven years ago, two Brent Geese alighted on the river Derwent, just outside the town of Derby. A local fowler saw the birds, but had previously exhausted his shot pouch; he, however, loaded his gun with gravel gathered on the shore, and with this extemporised charge actually killed one of the Geese, which was afterwards preserved by Mr. Hutchinson, the well-known naturalist of Derby, who found the small stones that slew the bird in its body.

† The name 'Grey Goose' is locally applied to 'The Grey-Lag,' 'The Bean,' 'The Pink-footed,' and 'The White-fronted.'

small *white* feathers round the base of the bill. The bill *all one shade, flesh colour*, except its *tip*, which is *white*. Legs and feet *flesh colour*.

General colour above *greyish-brown*; fore-neck and

GREY-LAG GOOSE

breast *pale brown*, abdomen nearly *white*. Many to few *black* spots (in the form of transverse bars of an inch or so in length) on the lower breast and abdomen. The lower back and the smaller wing-

feathers, *bluish-grey*. This shade of *blue grey* is peculiar to the GREY-LAG and to the much smaller PINK-FOOTED GOOSE, but the latter has the *blue grey* on the shoulder of the wing only.

The young GREY-LAGS are darker on the upper-parts than the adults, have the head and neck a lighter brown, and have no black spots on their under-parts.

The GREY-LAG is the heaviest and largest Goose that visits us.

Nests.—The *only* GOOSE that breeds in a wild state in the British Isles. It nests in small and decreasing numbers in the north of Scotland, in Ross-shire, Sutherland, and Caithness; and in the Islands of the Hebrides; but not in England, Wales, or Ireland. The GREY-LAG GOOSE nests in the vicinity of water, forming a structure of grass, moss, or reeds, with a margin of down, in which are laid about six *dull white* eggs.

Though I have met with considerable numbers of these Geese in a few parts of Scotland,* and very locally in the West of Ireland,† yet I consider the GREY-LAG

* In Scotland, Grey-Lags, to the number of two to three hundred, annually pass the winter months on the 'Carse of Gowrie' along the north shore of the estuary of the Tay. This locality is also haunted by immense flights of Pink-footed Geese, but the two kinds are never seen to intermix.

† From four to five hundred Grey-Lags have, during present memory, frequented annually throughout the winter certain low-lying lands that border the estuary of the river Shannon below

an uncommon bird, generally, in the British Islands, and a *rare* visitor to England and Wales.

GREY GEESE are usually *said* to be GREY-LAGS *before* they are shot, though they commonly prove to be the BEAN or PINK-FOOTED species when *killed*.*

THE BEAN GOOSE

Local name.—GREY GOOSE.

Length.—33 to 34 inches.

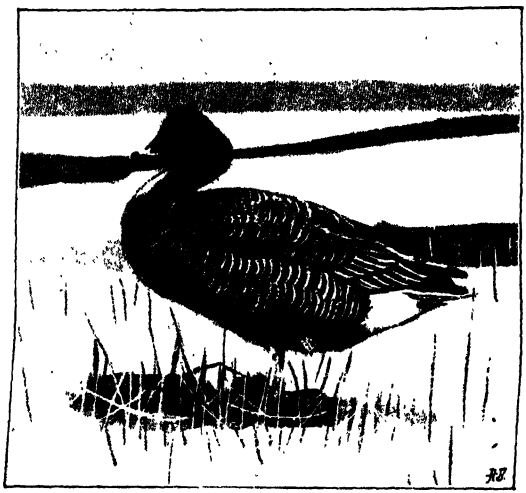
Weight.—7½ lbs. to 8 lbs. (a very fine one 8½ lbs.)

Markings.—The adults have a few small *white*

Limerick, in Ireland. I have made many shots at them with the stanchion-gun, and have even known fowlers to kill, in this fashion, forty to fifty at one discharge.

* The cry of the Grey-Lag exactly resembles that of domestic geese, and readily distinguishes this species, even when flying at a distance, from other Grey Geese. The Grey-Lag is easily domesticated, and my friend Sir Frederick Milbank, of Thorpe Perrow, Yorkshire, has a fine herd of these birds. Sir Frederick writes to me (1896):—'I have now thirty Grey-Lags at Thorpe, all produced from eggs or young birds I obtained in Scotland. They pair in the spring and nest freely; they fly all about the place, especially in the breeding season, often at a great height. Many breed in the gardens under spruce trees that are branched to the ground; others nest by the water-side in a narrow plantation opposite the house, and some even go into coverts a mile away. I have not one bird with its wings cut, and I never lost but two, and these were killed by foxes. I constantly see the whole number grazing in distant parts of the park. In the evening they always flight back to the ornamental water in front of the hall-door, where they are fed on Indian corn. It is very pretty to see them on wing round the house, making at times such a wild noise as they fly.'

feathers here and there round the base of the bill. Near the centre of the upper bill an oblong patch of *orange yellow*; the rest of the bill, its base and its tip, *black*. Legs and feet *orange yellow*. No



black spots on the under-parts, as in the GREY-LAG, or *grey blue* on the wings, as in the GREY-LAG and PINK-FOOTED. Though this Goose is of similar length to the GREY-LAG, it is of a finer shape, hence of lighter weight and smaller in appearance.

Nests.—In the north of Norway and Sweden; in Novaya-Zemlya, Northern Russia, and Arctic Siberia. The nest is similar in situation and construction to that of the GREY-LAG.

The BEAN is, perhaps, the most generally numerous GREY GOOSE we have. I have seen this bird in fair abundance in nearly every part of the British Isles, with the exception of our Eastern counties.

THE PINK-FOOTED GOOSE *

Local name.—GREY GOOSE. (In Scotland, Bean-nebs.)

Length.—27 to 28 inches.

Weight.—6½ lbs. to 7 lbs. (a very fine one 7¼ lbs.)

Markings.—The adults have the base of the bill as far as the outer end of the nostrils *black*, its tip also *black*. A small band of *pink* just below the nostrils, which encircles both the upper and lower bill.† The

* In many respects the 'Pink-footed' is suspiciously like a small variety of the Bean Goose. I have shot the former with the legs and the patch on the bill quite as orange yellow as in the Bean Goose. The cry of the Pink-footed Goose is a remarkably shrill one.

† Sometimes a few white feathers round the base of the bill as in the Grey-Lag and the Bean Goose.

bill only 1¾ in., or *short* and *stunted* when compared with the bills of the other GREY GEESE. The shoulders of the wings (as in the GREY-LAG) *blue grey*, but the back of *this* bird is *brown* to *ash grey*. The legs and feet *pink*.

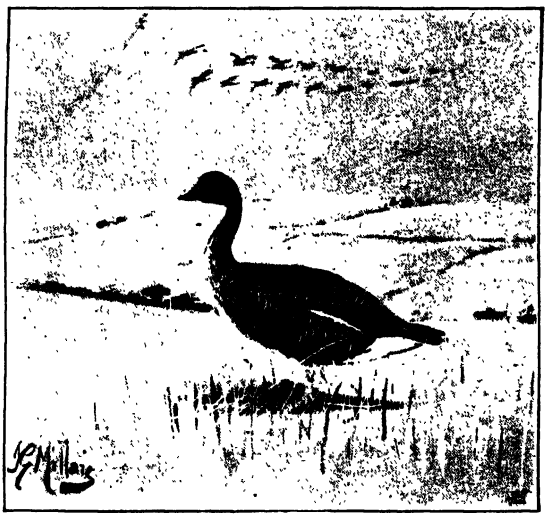
Nests.—Has been proved to breed in Spitzbergen * and is said to do so in Iceland, but otherwise its distribution in the nesting season is unknown.

The PINK-FOOTED is considerably smaller than the GREY-LAG and somewhat less than the BEAN GOOSE. It is a common bird during autumn and winter in parts of Great Britain; notably in the south-east of Scotland; on the wolds of Yorkshire; in Lincolnshire; near the coast of Norfolk; and in several other localities, excepting the south of England. On the banks of the Severn and along the shores of the Bristol Channel I have seen large numbers of these birds. In Ireland

* My friend Sir Henry Boynton, of Burton Agnes, so well known as a naturalist and sportsman, writes to me: 'I took a nest of the Pink-footed Goose in Spitzbergen early in July, on a small piece of flat ground a few yards square and overhung by a rock. The nest was on the side of a hill and was situated six or seven hundred feet above the Fjord; the hill was all stone, and there was no water near except the salt-water of the Fjord. I shot the goose and gander, and brought the skins home with me, and they are now in my collection.' Sir Henry adds, 'I never saw a Bean Goose all the time I was in Spitzbergen, nor a Bernacle, but Brent Geese were there in thousands, and in August nearly all moulting and unable to fly.'

I have never shot or heard of the PINK-FOOTED GOOSE, and it has not been recorded therefrom.

This Goose freely associates with both the BEAN



PINK-FOOTED GOOSE

and the WHITE-FRONTED GOOSE. I have often seen all three together, and, indeed shot them when in company.

THE WHITE-FRONTED GOOSE

Local names.—GREY GOOSE, LAUGHING GOOSE (from its hoarse cry), BARRED GOOSE, TORTOISESHELL GOOSE.

(The two latter names from the conspicuous black markings on its breast.)

Length.—26 to 27 inches.

White-fronted Goose

Weight.—6 lbs. to 6½ lbs. (a very fine one, 7 lbs.)

Markings.—There is no mistaking this Goose, if in adult, or nearly adult, plumage. Both sexes have

a broad *white* band of feathers round the base of the upper bill which encircles the forehead to near the eye (hence the name WHITE-FRONTED). Underneath *brownish-white*; from the upper part of the breast to the legs, boldly and handsomely barred and patched from side to side with *black*. The bill *all one shade, orange yellow*, except the tip, which is *white*. The legs and feet *orange yellow*. The young birds of the year have no *black* bars on the breast, and have *dark brown* instead of *white* on the forehead.*

Nests.—Chiefly in Arctic Siberia, but also in Russia and Iceland. If we regard the LESSER WHITE-FRONTED GOOSE (see page 82) as a mere race of this species, then Northern Scandinavia must be added to its breeding range. A very large form, known as 'GAMBEL'S GOOSE,' breeds throughout Arctic America and in Greenland. The nest of the WHITE-FRONTED GOOSE resembles that of the BEAN and GREY-LAG.

The WHITE-FRONTED, like the PINK-FOOTED, is also a good deal less than the GREY-LAG and is somewhat smaller than the BEAN GOOSE. Though of local distribution, I have seen this bird in large gatherings, chiefly in the west parts of England and Ireland; and in small numbers in Scotland.

* All the White-fronted Geese I have killed have had their claws a light horn colour, the other Geese having, in my experience, their claws brownish-black.

It always visits us in greater abundance should severe weather prevail abroad. I have frequently seen WHITE-FRONTED in company with BEAN and PINK-FOOTED GEESE.

NOTE.—The immature of the four preceding GREY GEESE are at times difficult to identify if their plumage is alone considered, but the colouring of their bills and feet, combined with their *weight* and *length*, are distinctive in most cases.. In *young* birds the colours are, however, always less characteristic than in adults, and their general plumage is darker.

The adult females have a *slightly* more subdued tone of plumage than the adult males, and generally weigh a pound less, and are an inch or two shorter. The *young* of both sexes, in their first winter, are from a pound to a pound and a half lighter in weight than the adults.

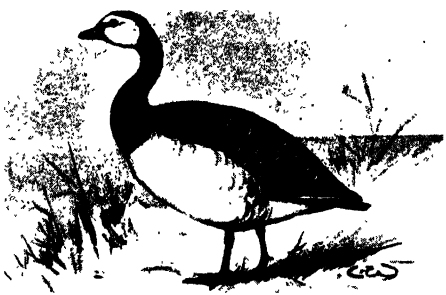
THE BERNACLE GOOSE

Local name.—Generally known by its correct name, its colouring being so distinctive and its haunts so local.

Length.—24 to 25 inches.

Weight.—5 lbs. to 5¾ lbs. (a very fine one nearly 6 lbs.)

Markings.—The adults have the top of the head, the neck, and the throat, *black*. The forehead, the chin, and the sides of the head, *white*. A small *black* streak between each eye and the base of the bill. The back *silver grey* barred with *black* and *white*, which gives the bird an elegant dappled appearance. Under-



BERNACLE GOOSE.

neath, from the lower part of the neck to near the tail, *greyish-white*. The bill, the feet, and legs, *black*. The bill a little under 1½ inch. There is no mistaking the immature of the BERNACLE GOOSE, as, though the colouring is less vivid than in the adult bird, the characteristic markings are always present.

Nests.—Unknown.* It is, however, *supposed* to breed in Greenland, Iceland, Spitzbergen, and Novaya-Zemlya.

The BERNACLE is very local in its distribution in the British Islands, and is chiefly to be met with on our north-western coasts, and then only in comparatively small numbers, save in the Solway Firth, where it is sometimes abundant.

BERNACLE usually arrive on our shores during the first or second week of October, and differ in this respect from the GREY GEESE, as these, with the exception of the 'WHITE-FRONTED,' appear earlier in the autumn.

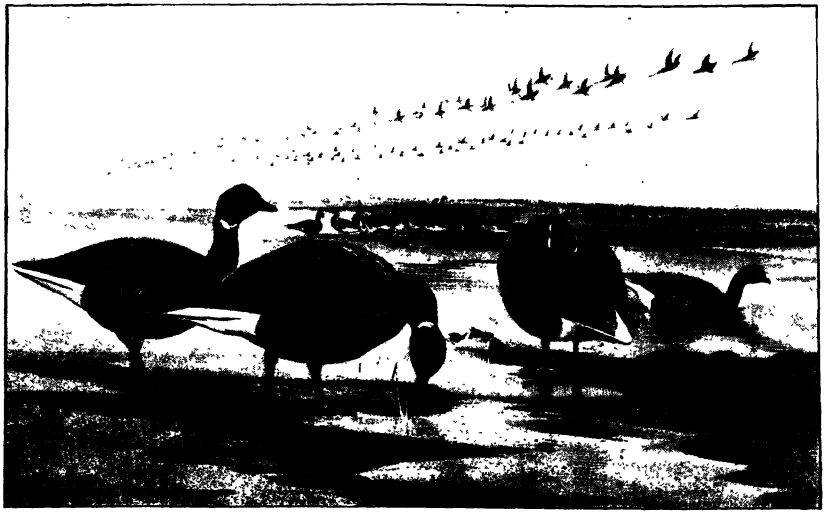
THE BRENT GOOSE

Local names.—BLACK GOOSE (in Ireland and in parts of England BERNACLE GOOSE; in Holland, from its cry, ROT GOOSE).

Length.—22 to 25 inches.

* A pair of Bernacle are said to have bred on one of the Lofoten Islands, off the coast of Norway; this is, however, even if true, an exceptional occurrence, and in no way assists us to find the as yet undiscovered nesting quarters of this Goose.

It is curious that the Bernacle Goose breeds freely in a state of captivity, though the Brent has never been known to nest in a tame condition.



BRENT GEESE IN AN ESTUARY

Weight.—3¾ lbs. to 4¼ lbs. (a very fine one 4½ lbs.)

Markings.—The adults have the head, neck, throat, and upper part of the breast, a rich *black*. A small *white* patch on each side of the neck, that sometimes almost forms a collar. The lower part of the breast, and the abdomen, *dark* to *light grey*. The back and wings *brownish-black*, the feathers edged with a lighter shade. Underneath, from near the legs to the end of the tail, *white*. Bill and legs *black*. The former 1½ inch in length.

Its small size, dark head and neck, and generally *blackish* plumage are quite sufficient to identify this Goose from all others. There is no mistaking it, male or female, young or adult.*

Nests.—On islands in the Arctic Ocean, as Kolguev, Novaya-Zemlya, Spitzbergen, Franz Josef Land; on the coasts and islands of Siberia; and also in Eastern Arctic America.

* The Brent, though never to be confused with other Geese, varies not a little in its colouring. I have shot a great many *adult* Brent with (1) the lower part of the breast and the abdomen pure white; (2) with these parts of very dark slate, almost as dark as the neck; (3) with a dark breast and abdomen and a patch of white, the size of the hand, on the lower part of the breast. On the British coast I have often killed specimens of both the white and the dark bellied variety at the same shot. On the shores of North Holland you may shoot an entire winter and not kill, or even see, a Brent with a white abdomen; whilst on an estuary in France, out of many hundred killed last season by a gentleman-gunner, only one bird had white under-parts.

The BRENT is the common WILD-GOOSE of our coasts, and is never seen inland or on fresh-waters, save as an occasional bird carried out of its course by a gale, or that has, perhaps, alighted from exhaustion when migrating.

The only BRENT GOOSE I ever saw on dry land was one I wounded on the tide, and which flew into a farmyard a short distance from the sea-shore, where it was caught by a shepherd's dog among the corn-stacks.

Of all the restless gun-shy birds that ever swam, none equal this wild and game little Goose. It is for ever swimming, flying, or feeding, and in all my experience of BRENT GEESE—and I have followed, when afloat with the stanchion-gun, tens of thousands of them at different times—I have *never* seen, either with or without the telescope, a BRENT GOOSE *sleeping*.* Whether, as is natural, these birds sleep at night I cannot say; but even at night I have frequently heard their clamorous and far-resounding cries, as they drifted to and fro with the tide.

The wildness and astuteness of BRENT GEESE are only known to those who follow them with punt and great-gun on the coast.

When BRENT GEESE feed, they usually do so where they are safe from molestation. If they fly off from their feeding grounds, as these are covered by the tide, they take precious good care to select a resort (often the open sea) that is free from disturbance.

* The Brent in the illustration facing previous page is 'pluming,' *not* sleeping.

The BRENT are the wildest, most provoking, and yet withal, from their large numbers, the most tempting of all fowl the shooter strives to obtain.

These geese frequent our shores from about Christmas (a few weeks earlier in the north of Scotland) to the middle of March, sometimes in incredible numbers. There is scarcely an estuary round the coast of the British Islands that offers them suitable food in the way of flats covered with *Zostera* (sea-grass), that is not frequented by many hundreds (occasionally thousands) of BRENT GEESE in January and February.

Those inland-dwelling naturalists who lament the supposed absence of wildfowl in the present day in our Islands should only see the 'acres' of BRENT GEESE (and WIGEON) that annually visit parts of the eastern sea-board of England and Scotland, as well as the east and west coasts of Ireland.

As the BRENT GOOSE is seldom killed with the shoulder-gun, I shall allude to the sport it affords with the stanchion-gun when I treat of that form of shooting.

NOTE ON THE SIZE AND WEIGHT OF BRENT GEESE

These birds vary more in their dimensions and weight than do any other wildfowl I know. During the past few winters I have shot in our Islands, and individually recorded the weights of, six hundred Brent Geese. I found the birds ranged from as low as 2½ lbs. to as high as 4¾ lbs., the twelve largest averaging 4 lbs. 10 oz. in weight, and 26 in. in length. The usual weight, however, of a fine adult British-killed Brent is 4 lbs. Much the smallest Brent I ever killed on the British coast weighed only 1 lb. 14 oz., and was about the size of a drake Wigeon! Its lower breast and abdomen were pure white.

Markings.—The adults have the main flight-feathers of each wing *black*. The rest of the plumage *snow white*. The bill *red*, its tip *grey*. Legs and feet *red*. The young birds, in their first winter, are much shaded with *grey* on the body.

If you *should* chance to see this Goose on the wing you cannot fail to recognise it, as it will appear like a miniature swan with the outer half of each wing *black*. (The GANNET is marked with *black* on the wings in the same way.) If resting on the water, it will look *snow white*, and its closed wings will give the idea of large *black* feathers projecting over the tail, as depicted in the illustration opposite.

Nests.—The LARGER SNOW GOOSE nests in Eastern North America. The LESSER SNOW GOOSE breeds in Western North America and North-eastern Asia, and is, strange to say, the one that has been recorded in the British Islands.

I saw five of these Geese, in the hard winter of 1890–91, fly past me along the coast near Berwick-on-Tweed, within easy range, when I had, alas! no gun in my hand; and a few years ago three SNOW GEESE (they could be none other, as they were pure white with black-tipped wings) arrived with the large gaggles of WHITE-FRONTED GEESE at Berkeley for three winters in succession, but none of them were shot, though they were frequently seen.

The SNOW GOOSE has been obtained some four or five times in our Islands in autumn and winter.

Note.—The skins of the *Lesser Snow Goose* I have obtained from the coast of British Columbia are 25 in. to 26 in. in length. A gentleman (Mr. Sydney Williams) who has killed and weighed a great many in those parts, tells me the birds average from 5 lbs. to 5½ lbs., though he on one occasion obtained a specimen of the presumably 'Larger' Snow Goose that scaled 6½ lbs.

THE LESSER WHITE-FRONTED GOOSE
AND
THE RED-BREASTED GOOSE

These are also *very rare* stragglers to our shores. The former has only been obtained once or twice, and the latter but half a dozen times.*

The RED-BREASTED GOOSE is smaller even than the BRENT GOOSE, being only 22 inches in length.

The adult bird has a *white* patch in front of each eye; the top of the head, throat, and back of the neck, *black*, edged with a narrow band of *white*. The breast and neck *chestnut red* (hence the name), and a *red* patch, margined with *white*, behind and a little below the eye. Bill, feet, and legs, *dark brown*. The

* I have given the 'Lesser White-fronted Goose' a place as a straggler to Britain, but I have many times killed 'White-fronted Geese' in our Islands, that from their very small size and their markings might easily pass for examples of this race.

The Lesser White-fronted Goose is regarded by some ornithologists as the small Scandinavian form of the White-fronted Goose (see page 73).

RED-BREASTED GOOSE summers in Siberia and winters chiefly on the Caspian Sea.

THE EGYPTIAN GOOSE
THE CANADA GOOSE
THE SPUR-WINGED GOOSE

When obtained are but truants that have escaped from confinement on ornamental waters.

LETTER VII

DUCK-SHOOTING WITH THE SHOULDER-GUN BY DAY ON PRESERVED GROUND INLAND

This form of sport is represented by the lucky fowler who has at his disposal private duck preserves whereon he can shoot when his leisure permits, and the elements are favourable to success. In such 'sanctuaries' as these the Ducks are usually abundant throughout the winter; they are seldom molested, and may be described as more or less *tame* birds.

There is as wide a difference between this class of fowling and fowling proper, as there is between seeking for a stray Woodcock and shooting a hand-reared Pheasant out of a home covert.*

If preserved duck-shooting is extensive, and comprises marsh and shallow water, all the sportsman need do is to choose as rough a day as he can (a roaring gale from the east, with a snow storm for preference), and

* Fowling proper, as I have expressed it, means fowling on the sea or shore, or on wild unpreserved ground; a man has then to use his brains to outwit the birds.

tramp to and fro, killing his birds as they chance to rise before his gun, when, with straight powder, a good retriever, and a *slight* acquaintance with the habits of wildfowl, he cannot fail to fill his bag.

The ground should then be left quiet for a time, to encourage the Ducks to re-assemble and recover their peace of mind ere they are again attacked.

In some preserves the Ducks gather in large numbers on, may be, a few acres of fresh-water, and have to be treated in a different and more skilful fashion.

In *this* case never attempt to kill the birds as they rest on or rise off the water, for if you do you will obtain *very* few of them, and are likely to drive the majority away to a safer resort.

Act as follows: Build, in the summer, small shelter-huts (with open tops) of straw or reeds, and place these close round the verge of the lake, one shelter at each cardinal point of the compass; and as carefully hidden among under-growth or rushes as is feasible.

Now do not try for sport till you can select a day with a *dark* sky and a *very* strong wind. Occupy at *sunrise*, not a moment later, that shelter *from* which the wind blows fair *towards* the *centre* of the water. When you are well concealed, and it is light enough to see to shoot, send a man round the water's edge to put the fowl on wing. When the Ducks have

taken their departure (on no account fire at them *as* they leave), your assistant can retire out of sight till his services are next in demand. After a short time the Ducks will reappear in twos, threes, or in small numbers, and as they return they will *head the wind* and at first alight on, or fly over, the sheltered side of the water *and* within gun-shot of you, if you are positioned in accordance with my directions.*

Should there be other pieces of water in the neighbourhood, send a man or two to disturb these, and the Ducks that have flown to them for refuge will come home to where they were first flushed, and thus afford you shots at intervals throughout the day.

If the Ducks, as they return, settle on the water beyond the range of your gun, wait till a good many are collected, and then signal to your assistant to put them on wing, which he can do as often as necessary, so as to give you the chance of shooting them as they revisit, a few at a time, their favourite haunt on the lake.

If the lake is a fairly *large* one, you *may* require two or three hiding shelters on each side of it, so that you are able, as occasion requires, to occupy the one that exactly suits the wind as well as the part of the

* If there should be a small stream running into the lake that keeps a space of the latter *clear of ice in hard frost*, command, from a good concealment, this opening with your gun at dawn, when, if the weather be *cold* and *rough* and fowl *plentiful* in the district, you may obtain some fine shooting at the birds during the day as they fly to the unfrozen water to wash and drink.

windward shore the Ducks are wont to favour when they return after being driven away.

In the late afternoon the Ducks, as they become shy from being fired at, are apt to fly off to their feeding grounds, where they will remain till night-fall; and if these happen to be at a distance from you, or they bestow the security of an estuary of the sea, your sport is generally at an end by three o'clock.

Though on lakes of moderate size Duck-shooting in the manner I have described is more effective if you are alone, yet on larger waters I have seen good bags made when four or five sportsmen have tenanted a line of well-concealed shelters, judiciously placed on the windward shore.

It is, however, advisable to depend upon your own gun, as you will not then alarm the Ducks nearly so much as if several other shooters were with you. Another thing—should the boisterous weather that is necessary to a successful day's sport suddenly appear, you can take a candle-light breakfast, and sally forth at a moment's notice *without* having to consult the convenience of any one else.

Be careful not to disturb your Ducks too often on the same water; twice or thrice in the winter at most I should say; for if you persecute them, numerous though they be, they will soon learn to frequent a less harassed district.

One of the usual methods of obtaining a *few* WILD-DUCKS, and frightening perhaps a great many, is for a party of shooters to steal silently up to a small pool and take position round it, under cover of trees and bushes, or behind reed screens erected for the purpose of affording a near approach unperceived by the wildfowl.

The Ducks are put on wing when everybody is ready. There is one grand fusillade at the birds as they rise, *very few* come down, and the survivors probably desert their haunt for a week or more.

Supposing a pool of three or four acres holds a hundred WILD-DUCKS; surround it as you like with half a dozen good marksmen; flush the birds and let the sportsmen blaze away as they will; I warrant they will not kill a score before the Ducks bid a long *adieu*. Yet I would engage to kill sixty of the hundred to my own gun the first *suitably* stormy day, if I were permitted to drive the birds quietly off the water at dawn, and then to post myself in good concealment by the waterside to shoot them as they returned one by one, or in small parties, during the day. You may just as well put the birds *in the bag* and have a good day's sport by yourself, as permit a number of friends to frighten them away *without* thinning their numbers.*

* If you wish to kill the Ducks on some small piece of water they resort to by day, when you have perhaps but an hour or so at your disposal, or it is of no consequence if you drive the birds out of the district, as *may* be the case in some wild locality at home or abroad, all you need do is to conceal yourself *before* daylight on that part of

If you have a small tree-sheltered pool of an acre or two of shallow weed-grown water in a secluded locality, and this is frequented by a score or so of WILD-DUCKS, you can generally turn this score into a hundred with a little care.

(1) You should pinion and put down a dozen of the *pure bred* BROWN CALL DUCKS.

(2) Scatter, three or four times a week *after dark*, a bucketful of barley, wheat, and stackyard-rakings all round the shallow *edge* of the water. Acorns, malt-coombs, Indian corn, beans, and especially peas, are also excellent for attracting WILD-DUCKS. Commence in the autumn as the *young* Ducks arrive, for these will become tame if left quiet, will appreciate the food you supply, and when they fly out nightly, as all WILD-DUCKS do when in full feather, they will make known to others the excellent quarters they live in by day, and will bring many friends back with them at dawn.

Above all be generous with your food in frost, as *that* is the time the WILD-DUCKS will appreciate it and flock to it most, for they find it difficult to obtain a living inland in times of ice and snow.

the shore most sheltered from the wind, and fire away at them as they return at dawn from their nightly feeding grounds. A very strong wind is necessary, as the birds will then arrive independently, instead of all together as in calm weather. I once killed fifty Ducks in this way before breakfast, when the afternoon before a party of several sportsmen, by surrounding the same water in 'approved' style, bagged three!

(3) If you have, or can lead, a small stream through the pool, all the better, for this will keep some portion of it free from ice during frost, and the WILD-DUCKS will then be sure to visit the unfrozen part of the water in severe weather. For this reason if the pool is icebound, break an opening all along its sheltered shore, into which strew the usual supply of corn.

(4) Arrange (a few drain tiles will often answer) that a trickle of water drops perpendicularly into the pool at one end with a little splash, for the *sound of falling water*, however slight, will, particularly in a frost, bring WILD-DUCKS down from the clouds as they pass over at night, on the mere chance of their being able to wash and drink, which is quite as necessary to them as food.

Bear in mind that in most parts of our Islands WILD-DUCKS are continually migrating overhead on autumn nights, and flighting over on winter nights, though *you* may not see them, and that all you have to do is to offer the birds sufficient inducement and they will soon *visit* you, and if contented with their surroundings *remain*.

Many a small pool that is useless for sport could be made into a rare harbour for WILD-DUCKS if these few simple directions were attended to, and I know several places that, previous to my suggestions being acted upon, but a score ducks at most were ever even

seen, and at which *now* a hundred and more are sometimes *shot* in the winter.*

NOTE.—I have not alluded to Duck-shooting by night, as the owner of a private preserve has no cause to undergo the hardships this style of sport entails in winter, and he is generally a-bed when the poor fowler is compelled to seek for *his* modest bag; but should the former have an inclination to shoot by night, *then* I refer him to Letter X.

* If there is any risk from foxes, or you have difficulty in persuading your tame Call Ducks to remain on the pool, act as follows: Erect a circular enclosure (supported by stakes) some fifteen feet in diameter, of four-feet-high wire rabbit-netting. In the security of this confine your pinioned Call Ducks, and they will then be *safe*, and will as surely attract the wild birds as if they were swimming about at liberty. One half of the wire enclosure should stand in the water of the pool, and the other half on the land, so that its occupants can drink and wash at their pleasure. .

To attract Ducks to wild open ground—such as grouse-moors and marshes sow, in the spring, a half-acre of barley round the margin of some small shallow pool, and allow the ripened grain to 'shed' on the ground. The Wild-Ducks, for miles, will visit this 'lure' at dusk to obtain food, and to thus afford sport for the gun.

LETTER VIII

DUCK-SHOOTING WITH THE SHOULDER-GUN BY DAY ON THE COAST

IN my last letter I described duck-shooting as practised on preserved ground and water, where it may be said the fowl are, like the game in the coverts, the exclusive property of the landlord or sporting-tenant of the soil.

In this letter I will treat of wildfowl-shooting as it exists in unprotected places, such as the great stretches of sea-shore that are still free in many parts of our Islands, and which I trust may ever remain at the disposal of the humble fowler. Here we have a vastly different style of gunning: there is no certainty of sport in *this* case you may rest assured.

You will find neither WILD-DUCKS nor TEAL, all waiting to be shot at their owner's fancy, after the fashion of a private preserve; nor will you discover a quiet refuge, on land or water, that you may visit with every confidence of filling your bag.

No: in this case you will have to *work* with a will

for your Ducks; you will have to exercise all your ingenuity to procure a couple or two; you will have to study their movements by day and night, and learn their natural haunts; and you will probably have to compete with a dozen other fowlers just as eager as yourself to obtain the birds!

Under these circumstances, small wonder, the Ducks are shy and often inaccessible, and you are forced to be satisfied with very few of them as your share. Yet it is a healthy and interesting pursuit, and one in which a little success gives much content; for the pleasures of fowling are in no degree relative to the numbers slain, as three or four Ducks killed, after a deal of thought and trouble, may easily give you greater satisfaction than, perhaps, thrice this number obtained without any difficulties.

The fact is WILD-DUCK-shooting by day on *unpreserved* ground or water *inland* is so uncertain that 'tis scarce worthy of mention; for in daylight the birds either avoid such a harassed neighbourhood, or select some safe retreat, as a large lake, to rest on. The fowler has then little hope of sport till the evening flight (Letter IX). It may be well worth his while, though, to visit at *daybreak, if* the weather is *exceptionally* stormy, any pools or marshes he has *previously* discovered the birds frequent at night to feed; for, in gales and snow, Ducks will sometimes remain a half hour after daylight on their feeding grounds, hesitating, it may be, to face the strong wind or pelting sleet

that will beat against them as they fly back, perhaps several miles, to their usual haunts for the day.

Along the shores of an estuary of the sea there is, however, always a chance of sport, and the wilder and colder the weather, the better for the fowler.

On the tide there is, besides, a greater variety of birds to be seen, but few of which you are likely to shoot inland by day or night; you not only have the WILD-DUCK and TEAL, but you may also, among others, meet with WIGEON, MERGANSERS, SCOTERS, SCAUP, BRENT GEESE, the three large SEA-DIVERS, and all kinds of shore-birds, such as GODWITS, and CURLEW, and a medley of smaller WADERS as well.

You should lie in wait on that part of the shore *along* which the wind blows; for as the birds fly about, which they will continually do in boisterous weather, they are certain to *head* the *wind*, and from your position they are then likely to pass *across* you within shot.

If you are posted with the wind blowing directly *from* the land to the sea, you will not make a bag, for no Ducks or shore-birds will come within range except those that intend to fly inland, which will naturally not be many in the daytime.

If the wind blows *towards* the land the only birds that will offer you shots are those which head the

wind as they fly from the land to the sea, and these will be very few, you may be sure.

But if you can dig a hole, deep enough to hide you up to the shoulders, on some part of the shore near low-water mark (or are able to conceal yourself behind a natural or roughly-made shelter), and it is a stormy day, with the wind blowing, as I have explained, you will certainly obtain shots, and plenty of them, *if* of course fowl are in the vicinity.

Your *best* chance of sport is when there is a gale at sea and a hard frost; for the Ducks, Geese, and shore-birds will then be constantly on wing in search of food, which is not in severe weather, either by day or night, so accessible to them as usual.

A good position to ensconce yourself in is at the extremity of a promontory that runs some little distance straight from the shore; for wildfowl of all kinds seem to make a landmark of a projecting point of rock or sand, and will fly over the end of it in their passages from one part of an estuary to another.

Of all favourable places for this style of shooting, *none* equals the *last* piece of ooze-bank that is daily covered by the flowing tide, for it is *there* both Ducks and Waders will betake themselves when their other feeding and resting places are submerged.

I have enjoyed rare sport in *this* position; but you will, I need hardly explain, require a man and boat in

attendance not far distant, to bring you to land when the 'flood' makes a longer stay impossible.

Be sure the boat in waiting on you contains *spare oars* and *thowl pins*, for I was once nearly lost through my boatman breaking an oar in his struggles, against wind and wave, to arrive in time to save me from a ducking, the tide having flowed more rapidly than usual over the small island of flat sand I had dug my shelter-pit in.

It was indeed more exciting than amusing to watch the violent efforts of my rescuer in his endeavours to scull up to me with his *one* and *only* oar, the water meantime rising above my long boots, and nothing but an angry sea in view for a mile on every side.

If you care to risk digging a pit far from land in the centre of a desolate sand-flat or a bank of ooze, when these are left dry by the 'ebb,' be certain, therefore, you can reach the safety of the shore ere the incoming tide cuts off retreat, either by means of a boat or by your legs (I prefer the latter myself).*

The venture is well worth trying, if the weather be

* The pit should be excavated deep enough to conceal you up to the shoulders, and the mud or sand thrown out must be scattered about level, and *not* left in a heap to warn the fowl of your position. I have found that a pit is far less noticed by the birds in *daytime* than a barrel, as the latter looks dark and prominent from a little distance. A cloak or waterproof that assimilates to the colour of the surrounding ground is of great assistance to conceal you from the fowl till they are in range of your gun.

rough and cold, and I have made many a fine bag with the shoulder-gun after this fashion. You will have to select a spot for your pit that is in the line of flight of the fowl, as they fly *from* the open water *to* the places where they feed or rest.

You will also have to dig the pit near a main channel, for the Ducks and Geese will surely visit this now and then during low-water, it being their habit to leave the security of the ooze-banks at intervals to wash and plume. Let the pit, without causing your position to be *too* prominent, be as high above the water as you can place it, for if too near the level of the sea it will soon fill after the tide commences to flow—which is just the hour to obtain sport on a stormy day.

Be careful your clothes and cap are of a subdued colour; grey flannel is inconspicuous, and, if of stout material, very protective against a chill.

When fowl approach do not stir a finger till they are *almost* within shot; *then* be ready to fire quickly. Keep your face as low as you can, and mark the flight of the birds from under the peak of your cap.* The act

* I have found that a rather long peak to a cap and a hole in the peak, the size of a sixpence, opposite each eye is a convenience, as *you* can then plainly see the birds approaching, while your face may be kept concealed from *them* till they are *within* killing distance.

A bright gun barrel is fatal to success—ducks will shy off at a long distance if they see it flashing in the sunlight. Do not, however,

of raising the face towards birds coming to you will assuredly turn them away out of gun-shot.

A good dog, a brown Irish water-spaniel for choice, is indispensable for retrieving crippled birds. A winged Duck or Goose at once makes for the water, and then—what with firing at it as it swims and dives, and, *when* shot dead, waiting for it to drift ashore perhaps a quarter of a mile away—you may, if you have no dog, easily waste the best part of an hour ere it is secured, and possibly the most favourable portion of the day for your sport as well.

Always use a *wooden* spade for digging a shelter-hole; it is light to carry, and if it goes adrift it will *float*, and *may* be recovered.

paint the barrels, as every chip or scratch in the paint will create a hollow for rust to form in. I would as soon tar a gun as paint it.

Your best plan to preserve a gun from salt-water and to make it unnoticeable to fowl on a bright or any other day, is to 'clean and dry the barrels carefully outside, heat them well before a fire, and whilst warm rub them over with beeswax, and then smooth the latter down with the hand. Next have a cover of stout linen (well shrunk) fitted over the barrels from the muzzles to the break-off, and laced on tight by fine whip-cord passed through eyelets underneath. One edge of the cover will require an inch-wide projecting tongue all along it to prevent wet and damp entering at the joints where laced togsther. If you wish to remove the stock from the barrel, you can unlace the cover under the fore-end of the gun. The cover should be painted grey outside, with a narrow black line down its centre over the rib of the barrels, as a guide to aiming at night.

LETTER IX

*SHOOTING DUCKS WITH THE SHOULDER-GUN AS THEY 'FLIGHT' AT DUSK**

This mode of Duck-shooting is much *talked* of and *written* about, but it is in *my* experience a very uncertain sport, notwithstanding the artistic pictures I have seen relating thereto, and the glowing accounts I have *read* about it.

The *principle* of shooting Wild-Ducks when 'flighting' is for the fowler to take up a position that commands the course of the birds as they travel *from* the places they rest and sleep on during the day *to* the places they feed on by night.

* This letter refers to the 'Wild-Duck,' 'Teal,' and other 'surface-ducks' that commonly 'flight' to the marshes and fields at night for their food, and frequent fresh-water by day. The shooting of Wigeon on 'flight' is described in Letter XII. The Wigeon, though a 'surface-feeding duck' like the Wild-Duck or Teal, is by nature a coast-haunting bird and does *not* often 'flight' inland, but feeds at night on the *Zostera*-covered banks exposed by the ebb-tide. If Wigeon rest on lakes within a few miles of the sea, they will fly at dusk from these to the tidal flats.

Sometimes Wigeon haunt lakes which they find are too distant from the tide for a nightly visit thereto; under these conditions Wigeon are obliged to feed inland, as do the Wild-Duck and Teal of the district.

If there are marshes, wet meadows, shallow weed-grown pools, and mud-fringed rivers, within a few miles of the water (whether sea or mere), the Ducks haunt in daytime, then to such feeding grounds will they wing their way at dusk, retracing their course at dawn as they return to their customary quarters for the day.

It is easy enough to say, 'Oh, all you need do is to shoot the Ducks and Teal as they pass over you at dusk when flighting from their haunts by day to their feeding grounds at night'; but 'tis not so simple a matter as might appear.

If you know the *exact* feeding grounds of the birds, and can post yourself *close* to these, well and good; but flight-shooting at Ducks usually means that, for one cause or another, you have to stand at some distance from both their day and night resorts, perhaps half-way between each, and possibly a mile or more from either.

Wild-Ducks in *fine calm* weather scatter in all directions when they leave at dusk the security of the sea or of large lakes in search of food; and though there may be hundreds of birds in view by day, yet for this reason very few may happen to come within shot of you as they 'flight.'

The passage of Wild-Ducks at dusk on a favourable evening for shooting them seldom lasts longer

than twenty minutes, and though I have on many score occasions waited gun in hand for flight-shooting at Ducks, yet not once in a dozen times have I obtained fair sport, however abundant the birds might be in the neighbourhood. But here is, at all events, *some* information relative to this manner of shooting which I have proved to be reliable.

(1) If there are several places the Ducks nightly visit for food, and these are situated near the lake or estuary which they frequent by day, the birds are certain to favour those feeding grounds which they are forced to fly *against* the wind to reach. Ducks, like all other birds, invariably prefer to meet the wind when on wing; for when flying head to wind their feathers lie smooth, and they have also more control over their flight than is possible when the wind is behind them in their course. This will give you a good idea of *where* to post yourself for flight-shooting.

(2) If it so happen the feeding grounds of the Ducks are situated only in *one* locality, they will have no option but to visit these.

Should this be the case, there is little choice of position, and you will have to stand at dusk as near as you can to the imaginary line that connects the night and day resorts of the birds.

(3) If the wind is strong and *with* the Ducks in their flight, they will flit past in the dusk at such a pace that you will have little chance of bringing them down.

If the evening is calm the Ducks will usually come over high and out of gun-shot, and you will only realise they are passing skyward by the distant and musical whistle of their wings.

If the wind is *very* strong against the Ducks as they travel *to* their feeding grounds, *then* is your best chance, for they will fly low and tolerably slow, and hence be fairly easy to see and to shoot.

(4) If the wind, as you stand with your back to it (and your face in the direction the Ducks *should* come from), is slightly to one side or the other—that is to say, in a slanting direction as it blows from behind you—look straight downwind, for the Ducks are sure to come over you fair and true against the gale, though they may have to alter their course as they draw near the place they eventually intend to alight on.

You will naturally see the birds farther and better, and have, as a result, more chance of shooting them when they fly directly towards you than if they suddenly whisk past sideways.

(5) The most *favourable* evening for flight-shoot-

ing (*provided* the wind is strong and heading the birds *en route* to their feeding grounds) is when there is no moon and the sky is grey and dull at dusk; * for under these conditions the Ducks will commence to leave their day resorts almost to a minute—a few minutes earlier as the days shorten, and a few minutes later as they lengthen.

The *first* Ducks will 'flight' just at dusk, in a light you could not see to read by, and when the flame on firing your gun is plainly discerned.

The *last* Ducks will pass over some twenty minutes afterwards, and when it is too dark to shoot; but for fifteen minutes you *may* enjoy good sport, and I once obtained thirty-six WILD-DUCKS in this short space, a performance I never equalled before or since.

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(6) The most *unfavourable* night for 'flighting' is when the weather is fine and calm, the sky clear, and the moon bright; for the Ducks will not then 'flight' at dusk as usual, but will wait to do so till the moon declines or the night is darker, and seeing to shoot is generally out of the question. On *light* nights Ducks rarely 'flight' at a regular hour, as they will on a *dark* evening; for this reason you cannot tell, in the former case, when to expect them.

* An east wind is best, as you can then stand facing the west, from which quarter there is most light at dusk; it is therefore always the easiest one from which to see the birds coming towards you.

(7) As to killing Ducks on 'flight' at dawn, as they *return* from their haunts by night to their day resorts, I have *never* found this a success.

The birds commonly leave their feeding grounds *before* daybreak, when it is too dark for aiming, and from being dispersed over the country (as is their custom in the small hours of the morning) they will straggle back to where they rest during the day, from all round the compass, instead of one after the other in quick succession from a given quarter—as is their habit on a rough dark evening when hurrying to the places at which they *first* seek for food.

(8) I have often, to my advantage, noticed that WILD-DUCKS, as they fly at dusk to feed, pass night after night close to some prominent landmark, such as the crest of a *low* hill, an isolated group of trees, or perhaps over a high fence on the horizon. I have no doubt this regularity of flight past objects that are familiar to them assists the birds in the failing light to keep a direct course to their distant feeding grounds.

N.B.—You are liable to lose most of your Ducks when flight-shooting at dusk, unless you have a well-trained retriever or spaniel to gather them for you *directly* they fall to the gun; for when flight-time is over 'tis too dark to find the birds without a dog, and

the winged ones may be in the next parish! A clever dog soon enters into the spirit of this sport, and will even learn to give a low whimper, or else by his movements warn you that he hears the whistling wings of the fowl as they approach, which he can do at a distance of two gun-shots or more.

LETTER X

DUCK-SHOOTING WITH THE SHOULDER-GUN BY NIGHT INLAND

IN all inland Duck-shooting by *night*, the *first* thing is to discover *where* the birds *feed*.

The Ducks you see swimming by day on the sea and its estuaries, or on the centre of large lakes, are not for you; they are accessible only to the puntsman with his stanchion-gun. These birds are not feeding, but resting, and in the evening they will surely fly off somewhere or other to find sustenance. *Then* is the opportunity of the fowler with his shoulder-gun, for he can either shoot the birds when 'on flight' as described in the last letter, or he can seek them out in their feeding grounds as related in this one. The only Ducks that do not 'flight' regularly are the DIVING-DUCKS (of which the POCHARD and TUFTED DUCK are alone worth powder and shot), and the WIGEON.*

WILD-DUCK and other SURFACE-FEEDING DUCKS, the

* See footnote, page 99, referring to the habits of Wigeon at night.

Wigeon on the coast excepted, generally 'flight' with the regularity of the clock, quitting at dusk their day resorts for those they find food on by night, scattering for this purpose in all directions over the country, and frequently travelling a distance of eight or ten miles from where they rest by day.

Wild-Duck in mild weather can find food at night almost anywhere, and I have shot them as they flew to barley, wheat, and bean stubbles, and even potato fields; as well as to wet ditches and tiny pools that would appear by daylight most unlikely places for them to visit.

You need have no fear of driving Wild-Ducks out of the country by shooting them at their feeding grounds by night, as the birds fly to these either independently or in small numbers, and if driven from one place they soon find another to suit their taste not far distant.

With Wild-Geese it is different, as these birds are easily alarmed, for they rest and feed in large congregations, and leave in a body when disturbed.

The habit of Wild-Ducks is to feed till a couple of hours before dawn; they then fly to the pools and streams to wash and plume *before* they return, with the first suspicion of light in the east, to their usual haunts for the day.

It is this pluming of the Ducks that often enables the fowler to learn their movements, for any pool

the birds visit at night is sure to have some of their discarded down and feathers washed upon its lee-shore in the morning -a useful hint to the gunner in regard to the following night, when he should command with his gun the sheltered or windward side of the water, for it is *there* the Ducks will first alight on their arrival.

In *frost* the Ducks will forsake the spots they nightly haunt in mild weather, and will be found near springs and running water, for only in such can they then procure food, and nowhere else need you seek for sport.

One method of killing WILD-DUCKS inland at night in time of frost, which I have adopted with success, is to cut out with an axe a clear space in the ice over the *shallow* part of some pool which the birds frequent in mild weather, and to throw a pail-ful of crushed wheat (this will float) into the opening. The Ducks will quickly discover the fresh-water they are so much in need of; leave them a couple of nights to gather up and enjoy it, and the food, in peace; the third night sit on guard, gun in hand.

In *very* hard weather the water where you have broken the ice will rapidly freeze again; though if but a couple of Ducks come thereon, they will, by paddling to and fro, keep it clear.

The best time for this device is just as a thaw commences after a spell of frost, and *before* the ice has melted in the district sufficiently to provide water for the birds at *other* places. Under these conditions you will have no difficulty in keeping some unfrozen water for the Ducks to visit, and this may for several nights, even in a general thaw, be the only spot available for them to wash and drink in.

Though you can see to shoot Ducks by starlight on pools of water, I defy you to discern them on land, except in bright moonlight, when the birds can see *you* just as well, and indeed better than you can see *them*, and will avoid your vicinity as a result. As to building a shelter or digging a pit for concealment *inland* by night, I never found this repay the trouble, for ten to one the Ducks keep just out of shot, and however cunningly you contrive shelters or pits, yet they will suggest danger to these shy birds.

Save when they have pitched on water, and you are all ready for them as you crouch among the shadow of reeds, under-growth, or trees, there is only *one* other sure method of killing Ducks inland at night.

This is to take up a position for *flying* shots at dusk (or for an hour or two after dusk *if* there is a favourable *moon*), behind a *natural* shelter, as some tree, wall,

hedge, or bank, that is *close* to the marsh, stubble, or shallow water the fowl resort to for food.*

You will have to stand (facing downwind) without fail on that side of their feeding ground *from* which the wind blows, for from whatever quarter the Ducks originally voyage, they will *invariably head the wind* as they approach the spot they purpose to settle on.

* Consult Wigeon 'flighting,' Letter XII. p. 116, for a description of a suitable night for seeing to shoot birds on the wing by moonlight.

LETTER XI

DUCK-SHOOTING WITH THE SHOULDER-GUN BY NIGHT ON THE COAST

In *severe frost*, when Wild-Ducks are driven by ice and snow to the sea-coast from their usual haunts inland, I have obtained capital and most enjoyable sport at night by lying full length on a sheet of oilskin just where some tiny fresh-water rivulet, that traverses the mud-flats, joins the main channel of an estuary; for as the flood-tide makes, the Ducks will often swim up with it, feeding along the edge of the fresh-water as they do so.

The best time for obtaining shots is during the two hours subsequent to dusk, the tide being a quarter-flood at sunset; the fowl then feed greedily soon after twilight, as they are well aware their food will be denied them during high-water.

When visiting the shores of some estuary or harbour that is *strange* to you, with a view to Wild-Duck-shooting by night with the shoulder-gun, it is well you should know how to act.

Stroll by daylight along the margin of the tide,

and carefully locate the position of any little trickling stream of *fresh-water*, however small it be, that runs from the land seaward, then by night lie in wait near where the 'fresh' merges into the 'salt water,' for this will be the *first* place that any roving WILD-DUCKS will visit, especially in frost.

A few handfuls of corn, bruised to make it float, and thrown in so as to drift down the running water, will often work wonders in bringing Ducks to the gun, as it is an attraction the birds will not overlook when they have once found it out.

If you are residing some time in a locality, you may successfully bait several little outflows of fresh-water and favour them on alternate nights in quest of sport.

The most favourable *time* to strew your corn is at low-water; it will not then be carried away by the 'ebb,' but will drift back landward with the flood-tide, and give the Ducks a chance of following it up to your gun during the night as you lie in readiness for them.

I have killed WILD-DUCKS on the coast in this fashion night after night *during* a frost owing to their partiality for fresh-water, which they will seek till they find, and then visit regularly.

WIGEON are different, as these birds do not require fresh-water, and can exist on the tide without it throughout the winter.

You will seldom find WIGEON feeding with WILD-

Ducks at night in the little fresh-water rivulets that meander through the ooze, but on the centre of the weed-covered banks, where they are usually quite inaccessible to the shore shooter.

LETTER XII

Wigeon-shooting with the shoulder-gun by night on the coast

The best method of shooting Wigeon on the coast with the shoulder-gun (as they fly about in the early part of the night) is from a barrel sunk nearly level with the surrounding flats.

Your first move should be to ascertain *where* the birds *feed*; this will be on some bank of ooze that is covered with sea-grass, and will *not* be on bare sand or shore, for this sea-grass (*Zostera marina*) is the chief food supply of Wigeon on the coast.

Take a walk on a *calm* night at low-water along the banks of the tidal estuary you are visiting in search of sport, and if Wigeon are present you can easily locate them, as they feed, by the chorus of 'Whēoh! whēoh!' whistled by the males, as well as by the call 'Purr! purr!' sounded by the females.

In the early morning, *before* the flood tide has washed over the ground you heard the birds whistling on during the night, seek diligently for the footprints of Wigeon in the soft ooze among the sea-grass. These

WIGEON SHOOTING ON THE COAST AT NIGHT FROM A BARREL

impressions are not difficult to find, and from their webbed outline are easily recognised.

Now sink your barrel at a couple of hundred yards from where you found the footprints, and between the footprints and the open water you have noticed the WIGEON rest on by day.

If you sink the barrel right on the place where the WIGEON feed, one night's shooting will drive them to some other quarter, and your sport is at an end for a time.

The barrel should be sunk with its top six inches above the ooze, to prevent its being hidden (when you seek it at night) by the mud and sand washed round it by the tides. It should also, if possible, be located where stones are scattered about, for the WIGEON, being accustomed to see the latter, will not then so readily discover your presence as if you and your tub were positioned on smooth ground.

You will require a tin pail, with a rope to its handle, for emptying the barrel of the water and sand that will fill it with every tide, and when you leave for the shore the rope should be knotted through a hole bored in the rim of the barrel at its top, to anchor your bailer and prevent its drifting away.

The barrel will need a two-inch-square ledge of wood (in the form of short curving pieces that join to complete the circle) nailed round its inside about half way up; on this supporting rim you can rest a stretcher of ash to sit on, and which you can adjust so that you

may face in any direction the fowl are likely to come from—an advantage that a square box with a *fixed* seat cannot afford.

Place the barrel (be sure it is large enough to be comfortable, and will hide you up to the shoulders) so that it is left exposed by the 'ebb' two hours *before* low-water; this will allow you to remain in it four hours to shoot ere the 'flood' makes your position untenable, which, though a longer time than necessary for WIGEON-flighting, will permit you to act the part of Diogenes earlier or later according to the tide.

Occupy the barrel at dusk, and on a suitable night you should stay therein at least two hours; for WIGEON, unlike WILD-DUCK, usually fly about in search of food, or from one feeding ground to another, for a long time after dark before they finally settle down to their suppers, and you may, in propitious weather, kill your score or more birds between five or six o'clock and eight.*

You will find that on moonlight or starlight nights with a *clear* sky, as in frost, you will not be able to see the birds as they fly past you. The best night I have always found to be one when a full, or nearly full, moon

* I recollect, when a boy, a small barn-like building in the fens that did duty as a church, and which had to be pulled down ere it collapsed from age and damp. A new edifice was erected, but the old circular oak pulpit was condemned as useless. However, the parson, a man of resource and sporting instincts, sank his former pulpit in a neighbouring marsh, and 'addressed' the Ducks therefrom on moon-lit nights—with a long-barrelled shoulder-gun!

is shining, like a great lamp, through large, fast-moving, detached clouds of a *light* shade; you will then see the birds distinctly, and black as crows will they appear as they cross the deep open spaces in the sky, and you will detect them equally well against the moon-illumined clouds. (See illustration facing p. 115.)

I do not fancy a *strong* wind, as, if WIGEON have been much tossed about at sea or on the main channels of an estuary during the day, they are always hungry at dusk, and are then apt to fly direct to their feeding grounds and remain there. What is better is a fresh breeze, one just sufficient to make the birds fly low, and yet not so forcible as to prevent them flying about from one part of the ooze to another, as is their inclination.

AS you sit in your barrel *expect* the WIGEON to arrive *against* the wind, as this they are pretty sure to do wherever they come from, or on what part of the ground they mean subsequently to alight.

A retrieving spaniel (he stands cold better and takes up less room in a barrel than a retriever) is indispensable, or you are liable to lose *all* your winged birds, and if you can supply the poor creature with a bundle of dry straw to lie on, he will not shiver and whine and distress you by his misery.

You will find it a great convenience to carry two small forked sticks to erect in the ooze to rest your gun on, whilst you bail the water out of your tub, and a

mop to clean out the latter is a *luxury*, but it is not a handy implement to take from shore in addition to a gun and other belongings.

For this class of shooting an ordinary cylinder 12-bore, loaded with No. 7 shot, is best adapted; your birds will nearly all be killed at a fairly *close* distance (you cannot see them far), and the great thing is to fire a dose of pellets that will double them up and *not* merely wing them. This I have found No. 7 will do, at the usual 'night-flighting' range of 20 to 25 yards, more effectively than any other size.

LETTER XIII

*SURFACE-FEEDING DUCKS**

THE COMMON SHELDRAKE or SHELD-DUCK

Local names.—Bar Gander, Bar Duck, Shell-Goose, Sand or Strand Goose, Burrow Duck, Mussel Duck, Shell-Duck.

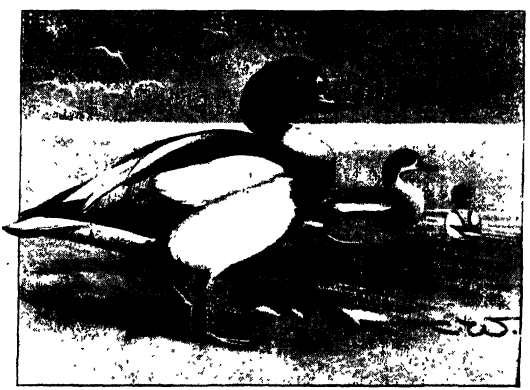
All these local names, it will be seen, are suggested by the plumage or habits of the bird. The word *Sheldrake* is supposed to have originally implied a *parti-coloured* or *black* and *white* plumage, such as is shown by this Duck, the male Golden-eye and the Magpie. Shell-duck is, however, its more usual name, and one commonly applied to the bird by coast fowlers from its custom of frequenting mussel-banks, and seeking either on sand or in shallow water for small shell-fish. I have even heard Diving-Ducks locally alluded to as *shell-ducks*, from the fact that they also, to some extent, exist on shell-fish.

* See note on the plumage of Ducks, p. 192.

Length.—25 to 26 inches.

Weight.—$3\frac{1}{2}$ lbs. to $3\frac{3}{4}$ lbs. (a very fine one, 4 lbs.)

Markings.—The adult male has the head and upper neck rich *black* tinged with *metallic green*.



A collar of *white* encircles the lower neck and upper breast; below the latter a broad band of bright *chestnut* passes quite round the body, being wide on the breast and narrower on the back.

The general plumage of the body and wings *black*, *white*, and *chestnut*; some of the smaller wing-feathers

being *bronze-green* on their outer margins. Legs and feet *pink*. The bill, and the knob at its base, *scarlet*.

The female has no knob on the base of the bill; her colouring is a trifle more subdued, and she is slightly smaller than her consort.

Nests.—Here and there in small numbers all round our sea-coast, but more abundantly in Scotland and Wales than elsewhere in the British Islands.*

The COMMON SHELDRAKE breeds near the sea in many parts of Europe, including the shores of Holland, Denmark, Norway and Sweden.

If sand-hills lie *close* to the sea, SHELDRAKES will nest in them, either in holes of their own excavation, or in deserted rabbit burrows. The eggs are eight to twelve in number, and *glossy white*.

These very handsome Ducks are not uncommon to our sea-board in winter, though I have rarely heard of one being obtained inland during the cold season. They chiefly haunt the great sand-flats which the ebb-tide exposes on the shallow parts of our coast.

The SHELDRAKE is the largest and heaviest of our SURFACE-FEEDING DUCKS, though the PINTAIL, by reason of its long tail only, equals it in length.

* On Loch Leven, of trouting fame, about ten miles from the sea, some half-dozen pairs of Sheldrake nest annually.

The rich chestnut markings of a SHELDRAKE cannot be discerned unless the fowler is almost within gun-shot, for at some distance its plumage appears black and white only.

I have found the SHELDRAKE wild and unapproachable in mild weather, but fairly tame in severe frost.

I have seldom noticed a hundred SHELDRAKES together in our Islands; but in Northern Germany, where this bird is carefully protected on account of the edible quality of its eggs, I have seen thrice as many, and more, in a gathering.

I once had sixty eggs of the SHELDRAKE sent me rom North Holland, and out of this number, notwithstanding a long journey by sea and land, I reared thirty birds and kept them alive for several years, but, in spite of the inducements I offered them in the way of sand and artificial burrows, I could never tempt them to nest.*

The SHELDRAKE is worthless as food, but in brilliance of dress and elegance of shape it is not surpassed by any of our wild water-fowl.

The SHELDRAKE in several respects resembles the WILD-GOOSE, particularly as its female is very similar in plumage to the male.

The flight of SHELDRAKES is sedate and regular

* Sheldrakes nest, in a tame condition, on many preserved waters in our Islands. I lately saw one of these birds sitting on her eggs in the island of the ornamental lake of St. James's Park.

and very like that of WILD-GEESE, as also are their movements on land.

THE RUDDY SHELDRAKE

The bill, legs, and feet of this bird are not pink like those of the common SHELDRAKE, but are *black*; the general colouring is *orange chestnut* on the body, passing to *buff* on the head; the tail, and the long feathers of the wings, are nearly *black*; and there is no *white* on the plumage, *except* a large patch on the shoulder of each wing. The male (in summer) has a well-defined narrow *black* collar round the neck, which is absent in the female. It is the same size as its common relative.

It is just possible that one or two of the very few RUDDY SHELDRAKES now and then recorded as having been shot in the British Islands are really wild birds that have wandered from Eastern Europe or Northern Africa; but, as the RUDDY SHELDRAKE is common to our aquatic preserves, it is more likely they are, in the majority of instances, semi-domesticated ones that have escaped from ornamental waters.

THE WILD-DUCK

Such a well-known bird requires neither sketch nor description; it does not even possess a local name, so familiar is it to us all.

It appears to be the fashion nowadays to call the WILD-DUCK, male or female, the 'MALLARD'—goodness knows why! The name WILD-DUCK as applied generally to both sexes is too ancient a one to meddle with, and 'tis surely easy enough to know the male as the 'MALLARD' and the female as the 'WILD-DUCK,' if you wish to distinguish them *when* obtained.*

The WILD-DUCK nests in our Islands wherever it finds food and water to its fancy, with protection from disturbance by man, dog, and gun, for no bird is more anxious to be sociable or more willing to rear its young in our midst than the WILD-DUCK, if some quiet retreat is placed at its disposal.

Since the better enforcement of the Wild Birds' Protection Act, the WILD-DUCK has considerably increased in numbers in the British Islands; the only folk who complain of this Act being those 'sportsmen' who are rightly debarred by its provisions from following the miserable practice of flapper-shooting in July. This cockney style of gunning consists in slaughtering the young birds before they can fly; a pastime resembling 'rat-hunting' rather than 'duck-shooting,' and one no honest fowler would countenance; for killing a half-fledged bird as it scuttles over the water

* I have usually found the very old mallards of the Wild-Duck have their bills a rich orange yellow, those of the younger birds being the ordinary pea-green; a hint this for the cook.

without any chance of escape by flight is contrary to the feelings of a gentleman or a sportsman, and is an occupation worthy only of the 'pothunter'!

There is no doubt the great reservoirs that have been constructed during the last few years in our Islands, with a view to supplying water to the increasing population of the manufacturing towns, are grand harbours of refuge for WILD-DUCK, TEAL, and other SURFACE-DUCKS, and have been the means of largely adding to their number as resident wildfowl. In the west of Yorkshire alone there are now thousands of acres of water where grass and corn grew but a score years ago, and on the centre of these broad lakes hundreds of Ducks are enabled to rest in absolute security throughout the winter, whilst in summer they rear their young in the quiet moorlands hard by.

We have two races of WILD-DUCKS—namely, the birds that are home-bred, and those which journey to us from abroad in the autumn, and leave in the spring. The large majority of the former do not migrate, but nest in the vicinity of the lakes and marshes they frequent during the winter. These are always the finer birds, and as they take short flights, and live where food is plentiful, they are fat and heavy in comparison with the ones that visit us from distant shores.

The WILD-DUCKS that nest abroad usually haunt

our coasts from their arrival to their departure, or else the lakes and rivers that are adjacent to the tide. They are nearly half a pound lighter in weight than our home-bred birds and of a more slender shape.*

If a WILD-DUCK passes its time in salt-water, its breast will be stained dark from contact with brine and ooze. If you would discern whether a WILD-DUCK has *lately* visited the tide, wet your finger, rub it under the breast-feathers of the bird, and then put it to your tongue, and you can taste the salt of the sea or not, as the case may be.

In the event of severe frost, when the lakes are ice-bound and their feeding grounds are hidden by snow, our resident WILD-DUCKS at first visit the rivers and springs, where many are killed; but should the hard weather continue, they find their way to the coast, however far from it their usual haunts may be.

When Ducks vanish from their inland quarters, by reason of Arctic conditions, and suddenly appear on the estuaries, they fall an easy prey to the stanchion-gun shooter, for his small white craft does not excite their suspicions till they have on several occasions been unexpectedly fired at therefrom.

The WILD-DUCKS that only sojourn with us in the winter are much more wary than our home-bred birds. The latter, when driven to the coast by ice and snow, may be recognised (even *before* they are shot) as they

* The male of the foreign Wild-Duck usually weighs $2\frac{1}{2}$ lbs. to $2\frac{3}{4}$ lbs.; the home-bred Mallard, from $2\frac{3}{4}$ lbs. to 3 lbs.

WIGEON

rest on the ooze-flats of the estuaries, for they gather in companies of forty or fifty, and present a disconsolate appearance as they sit in their unusual surroundings, huddled close together for warmth and shelter.

THE WIGEON

Local names.—SMEE, WHISTLER, WHEW, NORWAY WIGEON.

Length.—18 to 19 inches.

Weight.—1 lb. 14 oz. to 2 lbs. (a very fine one, 2 lbs. 2 oz.)

Nests.—In *small* but *increasing* numbers in Scotland; chiefly in the counties of Selkirk, Perth, Ross, Cromarty, Caithness and Sutherland. Abroad, the WIGEON breeds very numerously in Northern Continental Europe and Asia; and occasionally as far south as Holland, Denmark, and Northern Germany. It also nests freely in Iceland.*

The WIGEON nests in similar situations to the WILD-DUCK, and lays about ten *buff-coloured* eggs.

As the WIGEON is so well known, and is ably depicted in Mr. Millais' sketch on the opposite page,

* The Wigeon is *said* to breed in the Orkney and Shetland Islands, and is also *supposed* to nest very sparingly in Ireland.

a description of its plumage is unnecessary. Though chiefly a tide-haunting bird, it is by far the most abundant of all the Ducks that visit the British Islands.

The WIGEON is one of the hardiest of our wildfowl. During the heaviest gales it dashes through the air with grace and freedom, or rests on waves that even seagulls seek shelter from ashore. A company of WIGEON may often be seen out at sea, like a long black ribbon floating on the water, rising and falling in unison with the tossing billows, yet, if viewed through a glass, 'tis odds many of them are fast asleep, whilst others are contentedly swimming and frolicking amid the very crests of the breakers.

The cry of the male WIGEON is 'Whēōh! whēōh!' as if whistled, *not* spoken—a merry note that gladdens the heart of the coast fowler. The call of the female is a loud 'Purr! purr!' given in a harsh querulous tone.*

I have seen large companies of WIGEON on lakes that lie within a few miles of the tide, but on freshwater far inland I have seldom met with them, save in limited numbers.

WIGEON are very common to many parts of our shores, and I could name at least a score localities on the coast of the British Islands where from three to

* It is curious to see the male Wigeon when he whistles; the bill is opened wide like a pair of scissors, and kept in this position for a second or two before the call note is sounded.

five thousand of these Ducks pass the winter, and yet comparatively few are shot, so wild and crafty do they become shortly after their arrival in the autumn.

The habit of WIGEON is to rest and sleep by day in some more or less sheltered bay of the coast, where they are safe from molestation, and too well do they know the spots that afford them security. Soon after dusk, *if* the ebb-tide has exposed the *Zostera*-grown banks of some adjacent harbour or estuary, they fly in to feed, and in ordinary weather take good care to regain the safety of their customary haunts before dawn. If the banks on which they feed are *not* exposed at dusk, WIGEON will often remain at sea till these *are* at their disposal.

If you see a number of WIGEON drifting about on the open tide, depend upon it their feeding grounds are within a short flight, for being 'SURFACE,' and not DIVING-DUCKS, they cannot obtain food in deep clear water, but only on land or ooze; in shallows of a few inches in depth; or where they can gather floating weed.

I have seen WIGEON commence to arrive in immense flights off the coasts of Denmark and North Germany as early in autumn as September 15. These great gatherings are then continually on the move south, their place being taken by fresh arrivals up to the middle of November. About the first week of October

WIGEON appear very numerously in North Holland, and by October 15 all over the coasts of South Holland and those of the British Islands, large numbers having by this time gradually worked their way south and west from their nesting quarters in Northern Europe.

A great many WIGEON are usually to be seen at the entrances to the estuaries and rivers of South Holland till Christmas, if the weather is mild; but should it be severe the majority of these birds either travel south, or else cross the North Sea, chiefly to the coasts of England and Ireland, to remain with us till about the last week of February.*

I have frequently seen such enormous gatherings of WIGEON off the Dutch coast that, though the birds might be a mile from me, the roar of their wings, as they rose from the water on a calm day, sounded like distant thunder.

The stanchion-gun shooter *never* has such a chance of a few heavy shots as when he finds a locality frequented by migrating WIGEON, for when on their pas-

* Wigeon were unusually late in leaving our coasts after the severe January and February of 1895. Mr. Leonard Brooke, an observant and successful 'big-gun shooter,' tells me that on April 7 he noticed quite two hundred Wigeon on an estuary in the West of England. If the weather is fairly mild, I have constantly noticed that Wigeon commence to leave the British Islands on their northward migration within two or three days of February 20.

AFTER A PRETTY LITTLE SHOT AT WIGEON WITH THE BIG GUN

sage south the birds often rest for the day on smooth sand-banks that are near the sea or its channels, and hence they are, at such times, easy of access by a gunning-punt.

If, on the other hand, WIGEON have settled down in a place and find food thereat to support them, it is another matter; for in *this* case they soon learn caution, and generally feed by night in the centre of some extensive flat of ooze, and sometimes rest and sleep in daylight on the same inaccessible ground, or, more often, and what is just as hopeless for the fowler, among the tumbling waves of open water.

There are very few estuaries round our coasts where the mud-flats, on which WIGEON feed, are intersected at low-water by creeks that are suitable for the fowler, armed either with a 'stanchion' or a shoulder-gun, to approach the birds in his duck-punt.

Between Hurst and Calshot, on the Solent, the channels are admirably adapted by nature for fowling afloat; but unfortunately WIGEON do not visit this neighbourhood as they did in years past; steam-boats, and shooters by the score, having driven them to seek less disturbed districts.

I have reared WIGEON with much success, and a few years ago I had between sixty and seventy of these handsome and interesting Ducks, all home-bred

descendants of the produce of a score of eggs I obtained in Scotland. Some of these birds I presented to friends, who assure me they nest freely, and that the young are not difficult to bring up. As the rare GADWALL has, through similar efforts, lately become one of our resident English Ducks, there is now some chance the WIGEON may follow its example.

Wild by nature though the WIGEON be, yet if reared from the egg no bird is tamer, and few so attractive on ornamental water.

THE TEAL

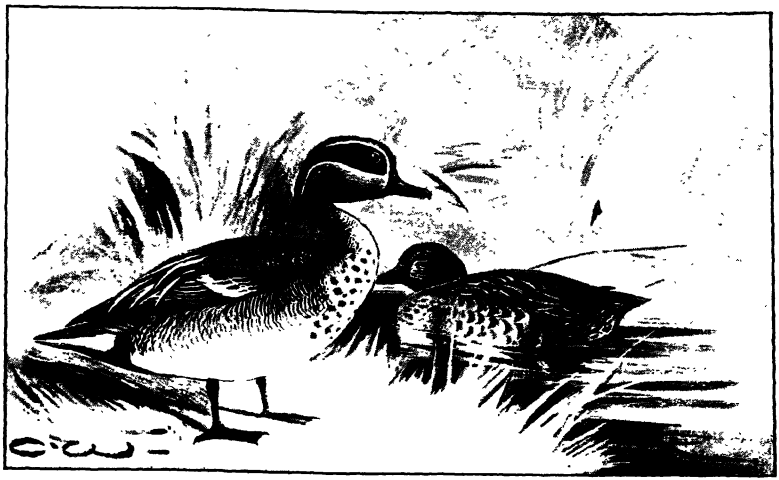
By reason of its diminutive size, the TEAL, our smallest Duck, is so well known that it has no local name, and a description of its plumage is unnecessary.

Length.—14 to 15 inches.

Weight.—12 oz. to 14 oz.

Nests.—Sparingly, but in most parts of the British Islands where suitable places exist, such as marsh, wet moorland, and rough grass-grown ground near lakes and rivers.

Abroad, the TEAL nests more or less abundantly in Iceland; in Northern and Central Europe, a few breeding as far south as the Mediterranean; and



TEAL

in Asia. The nest of the TEAL is composed of dry grasses, and is lined and edged with *blackish* down with *whitish* points. The eggs are *yellowish-white*, and about ten in number.

There is no Duck so dainty in form as, or more beautifully marked than, the TEAL, and for delicacy of flavour it excels all. You may shoot a WILD-DUCK and pop it straight into the bag without further notice, unless, maybe, you weigh it in your hand to test its plumpness; but, if you have an eye for shape and colour, I defy you to pocket a drake TEAL without first admiring its symmetry and plumage!

When on wing TEAL are very graceful, and their twists and turns as they encounter a strong wind suggest a comparison to the flight of WOODCOCK and SNIPE. A TEAL alights on the water with fluttering pinions like a butterfly settling on a flower, and springs with one upward dash from its natural element as quickly as a SNIPE rises from the ground. There is no more active bird on water, or land, or in the air, than a TEAL. (See note on the speed of TEAL, p. 149.)

Of all Ducks I consider the TEAL, when caught in a wild state and pinioned, the most shy. I have tamed many captured water-fowl, but the TEAL *never*, though I have tried my persuasive powers on scores of them. Do what I would they have nearly always perversely

terminated their existence either by going head first down rabbit holes, to be afterwards recovered as skeletons; or by twisting their necks in wire netting; or again by the simpler, though equally effective, method of starving themselves to death. And yet, when TEAL are reared from wild-laid eggs, I have found them as docile as could be wished, and ready to accept food from the hand.

The TEAL is not by nature a coast-resorting Duck. It is true that migratory TEAL, when they *first* arrive on our shores in October from Northern Europe, haunt the tide, but they soon leave for inland retreats, or for more southern countries.

Many of our home-bred TEAL, with their parents, frequent the lakes and marshes where they were reared, and these, together with the migrants of their kind that joined them in the autumn, are not to be seen on the coast in any number in winter, unless severe frost drives them down to the estuaries from the freshwaters they delight in.

Whether the fowler be shooting afloat or ashore, the TEAL is commonly the easiest of all Ducks to obtain, for a very slight blow will drop this tender little bird, and I have killed a great many at forty yards with No. 8 shot when I have been walking-up SNIPE.

After being fired at TEAL rarely fly far; so keep

A SHOT AT SUNSET ON THE DUTCH COAST
Blowing a hole through a wi-p of Teal as they fly past

them well in view, and, when you least expect it, you will probably see them suddenly dart down to pitch on land or water. You may then, perhaps, obtain another shot, if you are careful to mark their exact position, and to stalk them behind some shelter that conceals your approach *till* the birds are within range of your gun. Should you, however, after you have flushed TEAL and seen them alight, endeavour to view their retreat, *before* making a stalk, you will have little chance of putting any in the bag. The TEAL are sure to see *you* the instant you detect *their* presence, and will be prepared to take flight at any moment, for all wild birds are more readily put on wing by the sight of an object they deem suspicious than they are by scent or sound.

On the tide the stanchion-gun shooter rejoices at the presence of a number of TEAL, for they are usually much tamer than any other Ducks, as when first driven to the coast by frost they are ignorant of danger, and merely regard the gunning-punt as some piece of drifting ice or weed.

No fowl sit so favourably on sand or ooze for a shot from the stanchion-gun as TEAL, for in severe weather they crowd together as close as they can, and, when they rise, fly wing to wing like a flock of DUNLIN or STARLINGS. (See opposite sketch.)

THE PINTAIL

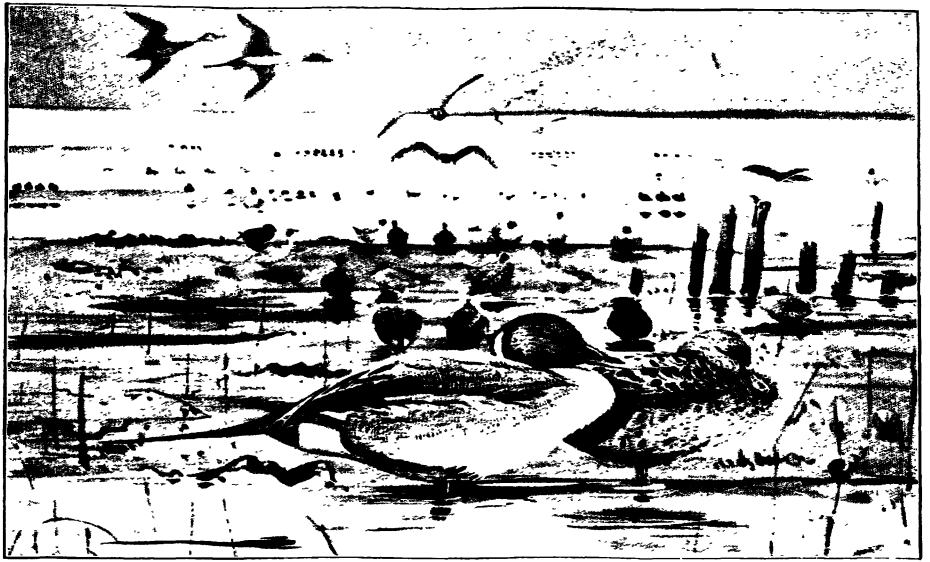
Local names.—Sea Pheasant, Pheasant Teal (in some places miscalled the Long-tailed Duck).

Length.—24 to 28 inches. (This measurement depends upon whether the Pintail has the two long central tail-feathers of the old male, or the shorter ones of a younger bird.)

Weight.—2 lbs. 8 oz. to 2 lbs. 12 oz.

Markings.—The adult male can be instantly recognised by the two long, pointed feathers in the tail (which have given him the appropriate name of 'Pintail'), as well as by the *white* stripes that pass from the back of the head down each side of the neck till they blend with the snowy *white* breast and underparts. The back and sides finely waved with *grey* and *white*. The head and throat *rich brown*. The wing-spot *green*, above which is a band of *buff*. The eyes *dark brown*. The bill and legs *slate grey*.

The female has the tail only slightly prolonged, but is easily known by her long, *brown* speckled, head and neck, and *especially* by the characteristic *oblique* spots or *buffish* bars on the *brown* tail-feathers.



PINTAIL

Nests.—The PINTAIL has, on one or two occasions, been proved to breed in the Inner Hebrides, and a few pairs undoubtedly nest round the shores of the lakes near the south-west coast of Ireland. In England and Wales the PINTAIL has never been recorded as nesting. I cannot say I have actually *found* a PINTAIL'S nest in Ireland, but I have more than once *seen* females with *half-grown young* swimming so close to me that I would not wantonly kill one, as further identification was unnecessary. Abroad, the PINTAIL nests freely in the northern and Arctic regions of Europe, Asia and America; and occasionally in Europe as far to the south as Holland and Northern Germany.

The nest is placed among heather or other cover, and is lined with *greyish-brown* down. The eggs are *pale green* in colour and about ten in number.

No Duck that visits our Islands is more beautiful than the PINTAIL.

The graceful neck, slender body, and long pointed tail-feathers of the male PINTAIL give him a most sprightly appearance on the water. These features, with his white breast and flanks, and the stripe down each side of his neck, enable him to be told from a distance at which other Ducks could not be identified.

The PINTAIL may be termed a rather uncommon

winter visitor to our Islands, though on a few of the south-western estuaries of Ireland I have seen considerable numbers, sometimes over a hundred in a gathering.*

On certain parts of these western shores I have found PINTAIL year after year in the same locality, passing an isolated existence throughout the winter. On other portions of the same coast they freely associate with WIGEON, WILD-DUCK, or TEAL, but never with DIVING-DUCKS.

PINTAIL are difficult birds to stalk, as when suspicious they can stretch their long necks to a height that enables them to see over a bank or other shelter behind which WIGEON or WILD-DUCK might be easily approached by the fowler.

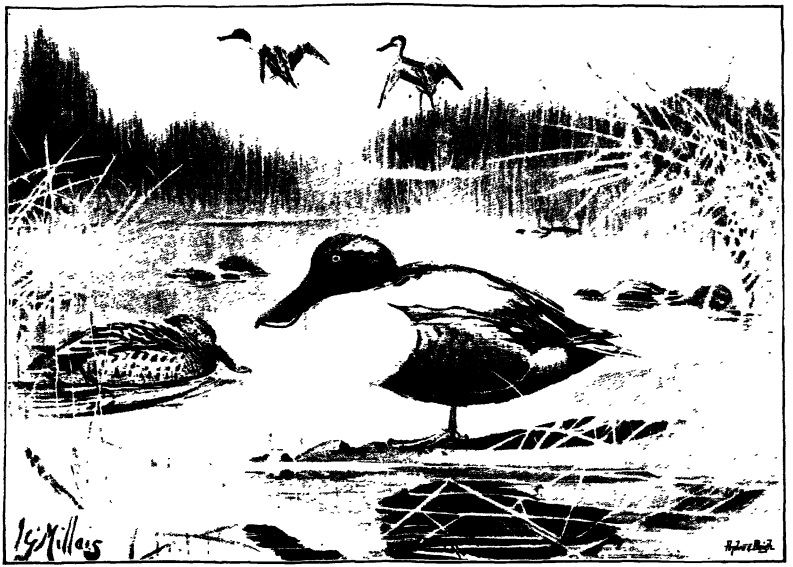
On the North Sea coast of Schleswig-Holstein PINTAILS are very abundant, and I have known from two to three hundred to be taken there in a day in *one* decoy.

THE SHOVELLER

Local names.—SPOONBILL, BROWN SHOVELLER, BLUE-WINGED SHOVELLER, SHOVEL BILL.

Length.—19 to 20 inches.

* The Pintail is also not uncommon on the estuary of the Dee, along the shores of Flint and Cheshire.



SHOVELLER

Weight.—1 lb. 8 oz. to 1 lb. 12 oz.

Markings.—The long and very heavy bill, expanded towards its end like a spoon, is sufficient to identify the Shoveller, male or female, in *any* stage of plumage, for no other British Duck has a bill in the least like it. The bill of the Shoveller is *slate lead* in colour. The legs and feet *reddish-orange*.

Nests.—Sparingly in the British Islands, but more frequently in Ireland and the Eastern counties of England than elsewhere. Abroad, the Shoveller breeds in varying numbers in Northern Russia; in Norway and Sweden (south of the Arctic Circle); also in Denmark and in many districts of Europe between the Baltic and the Mediterranean Seas. The Shoveller nests freely across temperate Asia; and is common in summer to North-western America, but is less numerous on the Atlantic side of that continent than on the Pacific coast.

The Shoveller nests among cover, such as heather and rushes, in the vicinity of water. The eggs are *pale greenish-white* in colour and about twelve in number.

The plumage of the adult male is very handsome. The *glossy-green* head and neck, *bright yellow* eye, *white* breast, *light blue* shoulder of the wing, and the rich

chestnut of the under-parts of the body, form striking contrasts of colour, yet the contour of this bird is somewhat marred by the extravagant size of its bill.*

I have rarely seen a SHOVELLER, tail up and head down, searching for food in a shallow like other SURFACE-DUCKS. The SHOVELLER, when feeding, careers rapidly over the surface of the water, skimming the latter with its bill, taking in food (probably aquatic insects) as it paddles onwards, and retaining what it collects by means of the short bristles that fringe the edges of its bill and act as strainers through which the food-exhausted water passes away.

In the SHOVELLER we have an example of a Duck with two names, for both on the coast and inland I have not seldom heard the immature birds and the females called COMMON or BROWN SHOVELLERS, and the adult males BLUE-WINGED SHOVELLERS, a distinction doubtless suggested by the subdued plumage of the former, and the handsome colouring of the latter.

I have seen SHOVELLERS in pretty nigh every portion of the British Islands, never many together, usually two or three, and oftener on large fresh-water lakes than on the tide.

* The female Shoveller also has the shoulders of the wings light blue, though in her case these parts are not nearly so bright as in the male; otherwise the colouration of the female Shoveller greatly resembles that of a Wild-Duck of the same sex.

THE GADWALL

Local name.—Too uncommon to have a local name except in Norfolk, where it is sometimes known as the GREY DUCK.

Length.—20 to 21 inches.

Weight.—2 lbs. to 2 lbs. 4 oz.

Markings.—The plumage of the adult male consists of shades of dark and light *grey*, and at a casual glance this bird rather resembles a dusky-coloured female WILD-DUCK. The male GADWALL, however, may be known by the large *white* patch near the centre of each wing (present in both sexes at all seasons of the year); by the very characteristic *crescent-shaped* markings on the lower neck and breast, which are caused by each feather being barred with very *light* and very *dark grey*; and by the conspicuous patch of *chestnut* below the shoulder of each wing. The eyes *hazel*. The bill *lead colour*. The legs and feet *orange-brown*.

The female is similar to the male in appearance, but is smaller; the crescent pencillings on her neck are *brown*, and though they are broader than are those of her consort, they are not so clearly defined; she also lacks the *chestnut* shoulder patch.

Nests.—Numerously in Norfolk, but very sparingly in other portions of the British Islands, and not in Scotland. Abroad, the GADWALL breeds in small numbers in Iceland; the south of Sweden; the Baltic Provinces, and Northern Germany; but in many parts

GADWALL.

of Russia, and in Siberia (south of the Arctic Circle), as well as in South-Eastern Europe, it is a common bird in summer.

The GADWALL nests freely in North America, also below the Arctic Circle.

The nesting habits of the GADWALL are similar to those of the Wild-Duck. The eggs, eight to twelve in number, are of a *buffy-white* tint.

GADWALL are plentiful on a few of the large estates in Norfolk that possess marsh and mere, where they may be seen in abundance from autumn to spring.

Many of the Norfolk GADWALL are descendants of a few wild birds caught in a decoy some thirty-five years since, and turned down, with their wings pinioned, on the large lake at Narford by the late Rev. John Fountain, a keen naturalist and duck-shooter.

These wing-cut GADWALL bred, and induced a number of the migratory birds of their kind that chanced to visit the lake at Narford to remain and nest. The consequence is that, year by year, GADWALL have increased both as residents in, and winter visitors to, Norfolk, till at the present day they are one of the best-known wildfowl in that duck-frequented county.

When large, shallow, weed-grown meres lie near the coast, and wildfowl are *encouraged* to visit such natural resorts of food and shelter, the owners thereof are rewarded by seeing birds become both numerous and tame which in less well-protected districts are wild and scarce.

This is certainly applicable to the GADWALL in

Norfolk, and shows how, with care, a rare and beautiful bird may sometimes become naturalised.

There is no doubt the position of Norfolk, projecting as it does into the North Sea, has a good deal to do with the frequency of the GADWALL in that county, for Norfolk is nearer than any other part of our coast to North Holland, where GADWALL are to be seen in winter in considerable numbers.

I regard the GADWALL as an uncommon Duck in our Islands *outside* the county of NORFOLK, though I have almost every winter, especially in IRELAND, seen or shot one or two.

The GADWALL is, however, by reason of its abundance in Norfolk, far more frequently met with nowadays throughout East Anglia than formerly; and even in the neighbouring counties of Yorkshire, Lincoln, Suffolk, and Essex, it is not nearly such a *rara avis* as it was, though to most other parts of our Islands it is still an irregular visitor.*

The GADWALL is a shy and retiring Duck, spending its time chiefly amid the shelter of reed-fringed lakes and pools. It is not, in my experience, a coast-frequenting bird, for soon after its arrival on our shores in autumn it finds its way to fresh-waters. I have very seldom seen GADWALL on the tide in winter, though of

* The Gadwall is a regular visitor to Tiree, a famous island for wildfowl in the Inner Hebrides, and where some of these Ducks are shot every autumn and winter.

course it is liable, like all SURFACE-FEEDING DUCKS, to be driven by frost to the sea-coast from its usual inland haunts.

THE GARGANEY

Local name.—SUMMER TEAL (so called because it is only a summer visitor to us, and not, like the COMMON TEAL, a resident in our Islands).

Length.—15 to 16 inches.

Weight.—14 oz. to 16 oz.

Markings.—The adult male may be known by the *white stripe* on each side of the head, which commences just in front of the eyes and runs over them and backwards to the nape of the neck. The upper part of the head *dark brown*; the cheeks *reddish-brown* with many short streaks of *white*. The feathers of the neck and breast *pale brown*, the former marked with *black* semicircular spots, and the latter with dark slightly curved bands. The abdomen *white*; the flanks varied with wavy cross lines of *black*, which terminate near the tail in two broad bands of *black* and *white* on either side.

The wing-spot *metallic green* between two bars of *white*; the shoulders of the wings *pale greyish-blue*.

The female much resembles the female of the COMMON TEAL, but is lighter generally in colour and has a *pale yellowish-white* band over each eye, and a *dull green* wing-spot between two bars of *white*.

Excepting the COMMON TEAL, than which it is

GARGANEY

slightly larger, the GARGANEY is much smaller than any other of our WILD-DUCKS.

Nests.—The GARGANEY *very* seldom breeds in our Islands save in Norfolk and Suffolk, where, owing to suit-

able localities and the protection afforded to our rarer wildfowl of late years, a few pairs nest regularly every summer. Abroad, the GARGANEY nests in Denmark, Sweden, Finland, and the Baltic Provinces; in parts of Russia and Asia (south of the Arctic Circle); and throughout Central and Southern Europe.

The GARGANEY nests in similar situations to the TEAL. The eggs resemble those of the Teal in size, but are *buffish-white* in colour.

The GARGANEY visits the British Islands in the spring on its way farther north to its breeding grounds, and again in the autumn as it passes us on its journey south, after nesting. The few GARGANEYS that stay in our Islands through the summer are, no doubt, attracted by favourable places to remain and nest, rather than voyage all the way to Northern Europe for that purpose.

I have occasionally seen GARGANEYS when I have been fishing in fresh-water lakes in spring, but never in winter; it is a Duck that appears when guns are laid by and wildfowl-shooting is at an end for the season. The GARGANEY is uncommon (almost rare) in our Islands, but is oftener met with near the east coast of England than elsewhere, especially in Norfolk and Suffolk.

THE AMERICAN WIGEON.—There is only *one* authenticated instance of the AMERICAN WIGEON being obtained in our Islands. I have closely inspected many thousands of the common WIGEON, but have not yet seen this rather larger bird amongst them.* The AMERICAN WIGEON, if an adult male, has a broad *streak of green* on each side of the head that slopes backwards from the eye towards the hind-neck. The forehead and top of the head *yellowish-white*; the chin, throat, and most of the head and neck, *whitish* closely speckled with *black*.

THE BLUE-WINGED TEAL, a straggler from America, has only been once obtained in the British Islands (Dumfriesshire, 1858). The adult male has a large crescent-shaped patch of *white* in *front* of each

* In the very severe January of 1881 I examined quite three thousand Wigeon, either shot by myself or that were exposed for sale, all killed on our western sea-board, which should be the most likely locality to find this bird.

Scarcely had I penned these lines when I had the good fortune to obtain a fine specimen of a British-killed American Wigeon (February 1895, a young male, *not* a female as at first reported). I chanced to visit the shop of Mr. R. Lee of Thirsk (a clever taxidermist and naturalist). I found Mr. Lee in the act of skinning an American Wigeon (quite fresh, and evidently killed only two or three days), which he had just bought for 2*s.* from among a number of Common Wigeon that were hanging up for sale in a Leeds game stall. This extremely rare visitant (now in my collection) was exhibited at the meeting of the Zoological Society in London (April 2, 1895), and has since been drawn by Mr. Thorburn for Lord Lilford's beautiful work, *Coloured Figures of British Birds*.

eye, which would at once distinguish it from the male GARGANEY, for in the latter bird the *white* curves down *behind* the eye. The shoulders of the wings a brilliant *blue* in *both* sexes, or much brighter in colour than the same parts of the male GARGANEY.

THE GREEN-WINGED TEAL, also a straggler from America, has been killed on three occasions in the British Islands. The adult male has a broad *white* bar across each side of the breast. The female is identical in plumage with the female of the COMMON TEAL.

Note on the Speed of Wildfowl *

I have long been of opinion that the pace of flight of many of our Wildfowl, especially that of the SURFACE-FEEDING DUCKS, has been greatly under-estimated, and that 130 to 150 miles per hour is much nearer the mark than the accepted 50 or 60. In relation to this subject, my friend Captain G. Gould (so well known as a wildfowl-shooter), writes to me, 'I have lately made some observations on the flight of TEAL, and I consider them as accurate as anything of the kind can be. I selected two promontories on the sea-

* I consider that Golden Plover, when flying near the ground in a direct course, are faster on the wing than any other British birds.

shore by measurement a mile apart, and I stood halfway between each. Several small lots of Teal passed, and I took their time on eight occasions. The least period of flight between the two points was 20 seconds, and the longest 25 seconds, the latter giving a speed of 144 miles per hour. There was a moderate breeze *against* the birds, they flew very low, they could not possibly have gone a straighter course, and from my elevated position on land I was able to record with great precision the time they occupied in passing from the one point to the other.'

LETTER XIV

DIVING-DUCKS

THE POCHARD

Local names.—Red-headed Pochard, Red-headed Diver or Wigeon, Dunbird, Poker, Red-headed Curre, Dun Curre.

Length.—18 to 19 inches.

Weight.—2 lbs. 2 oz. to 2 lbs. 6 oz.

Markings.—The adult male has the head and neck rich *chestnut red*; the breast, a narrow band on the upper back, and the whole of the lower back, *black*. The middle of the back, upper portion of the wings, and the flanks, *white*, delicately and closely undulated with fine *black* lines. The main feathers of the wings *light brown* with *blackish* edges. The abdomen and under the tail *greyish-white*. The eyes *orange red*. The bill *black* with a broad patch of *slate blue* across its centre. Legs and toes *slate grey*.

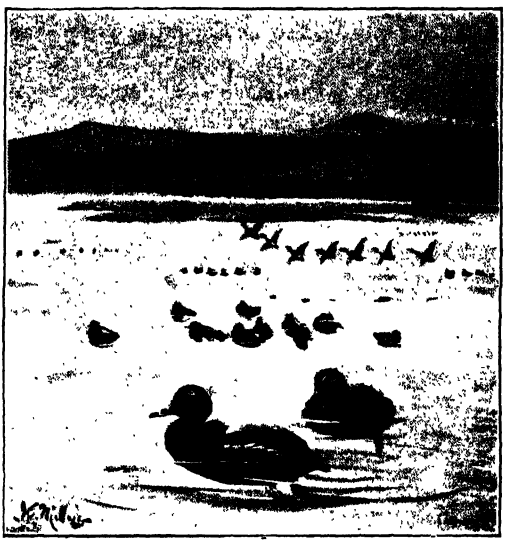
The adult female has the crown of the head and the hind-neck *dark brown*. The front part of the cheeks, and the chin, *greyish-white*. The breast and upper back *reddish-brown*, the sides and the rest of the back *greyish-brown*, undulated with *dark grey*. Otherwise the female resembles the male, but is duller in tint. The young birds are similar in plumage to the female.

Nests.—The POCHARD nests rather freely in the vicinity of most of the large reed-fringed fresh-water meres in the east of England, *very* rarely in Ireland, and sparingly in a few parts of Scotland. Abroad, the POCHARD breeds chiefly in Central Europe, also in Asia; but it does not nest as far north as the Arctic Circle. The nest is placed among herbage growing on the margins of meres and pools, or on islands therein. The eggs, usually about ten in number, are of a *greenish-drab* tint.

The POCHARD is nearly related to the CANVAS-BACK DUCK of America, and though smaller, is very similar in appearance. The POCHARD and the TUFTED DUCK are the only DIVING-DUCKS, so far as I am aware, that feed almost exclusively on weed and on the seeds of aquatic plants, the other members of this group, including the GOLDEN-EYE, existing chiefly on crustaceans and shellfish.

The local name of 'Curre' is very applicable to the POCHARD, as in the nesting season, or when at any

time alarmed, the call of both male and female is a loud rasping note exactly represented by the words curre, curre, cur-r-r-r-e.*



POCHARDS, like nearly all DIVING-DUCKS, are easier of approach in a wild state than SURFACE-DUCKS, yet I have never made a good shot at these birds, however numerous they may have been, either with a

* I have also often heard the male Pochard give a low whistle.

'stanchion' or a heavy shoulder-gun; for when suspicious of danger they do not rise on wing, but submerge their bodies till the water ripples over their backs as they swim. If followed by a boat they disperse till there are not, when they at length rise off the water as you draw within range, perhaps more than four or five together of the hundred or two that appeared such a dense gathering at a distance.

If you see, as you often may, a single POCHARD, or for that matter any other DIVING-DUCK, feeding near the shore, act as follows. Stand perfectly quiet till the bird dives for food, then at once run *twelve* paces towards the spot it disappeared at, and crouch low and remain still. Up comes the POCHARD like a cork. Wait till he dives again, run twelve paces more and crouch again, and repeat the manœuvre till the Duck at length bobs up within range of your gun. I have killed a great many DIVING-DUCKS in this manner when I have found them feeding *alone*; but should there be *several*, they will never dive at the same time, and to outwit them in this fashion is then impracticable.

POCHARDS haunt fresh-water lakes, where I have seen them in large numbers in winter, especially in Ireland and Scotland. I have occasionally shot these birds on the coast, but only when driven thereto by very hard weather.

THE SCAUP DUCK

Local names.—Blue Bill, Mussel Scaup, Black Pochard, Black Curre (sometimes miscalled a Pochard).

Length.—18 to 19 inches.

Weight.—2 lbs. 6 oz. to 2 lbs. 10 oz.

Markings.—The adult male has most of the back prettily variegated with fine wavy cross-lines of *black grey* and *white*. The head, neck, upper breast, lower part of the back, and the tail, *black*, tinged with *glossy-green* on the head and neck. The sides, and the under-parts from the breast to near the tail, *pure white*; a *white* bar on each wing. The bill pale *greyish-blue*. The legs and toes *lead blue*. The eyes at all ages *light yellow*.

The adult female (and the young of both sexes) may be known by the broad band of *white* round the *base* of the bill (*vide* plate opposite). The head *dark brown*. The neck, breast, and upper part of the back, *chocolate brown*; the rest of the back, *dusky-brown* vermiculated with *ashy-grey*. The sides *dull brown*, also vermiculated with *ashy-grey*. The under-parts below the breast, *white*, becoming *brownish* towards the tail.

Nests.—In Iceland; and in the northern and Arctic regions of Europe, Asia, and America.

The SCAUP breeds near the margins of, or on islands in, fresh-water lakes, placing its nest among herbage or on rough ground. The eggs are *dull buff* in colour, and from six to near a dozen in number.

The SCAUP is, it may be said, a Duck that haunts only the tide during its autumn and winter sojourn in our Islands, very few being killed inland, and these nearly always on lakes close to the coast. In fine calm weather the majority of the SCAUP rarely leave the open sea and the larger estuaries, though during on-shore gales they are often driven for shelter, sometimes in large numbers, to the calmer waters of our harbours and creeks.

The SCAUP is one of the commonest Ducks to be seen off our shores in winter, and may generally be noticed diving and swimming about the channels that intersect the mud-flats of the coast, which they usually frequent here and there in little clusters of eight or ten. At sea I have often met with many thousand SCAUP dotted about, but never densely congregated like WIGEON.

AS SCAUP, like all sea-frequenting DIVING-DUCKS, can obtain a living in deep tidal water on mussels and other small shell-fish, no weather, however severe, affects their condition.

SCAUP are the most unsuspicious and easily approached of all DIVING-DUCKS, but are quite unfit for table use, though in Catholic countries they are allowed to be eaten on fast days, under the supposition they taste more of fish than fowl!

A wounded SCAUP is a very troublesome cripple to retrieve, and a chase after one with a boat in but slightly rough water generally ends in disappointment. Even when there is no wind or wave, a winged SCAUP will hide so close among rocks and sea-weed that it is as liable to be lost as put in the bag. SCAUP seem to offer the resistance of tin plate to a charge of shot rather than flesh and feathers.

SCAUP are very slow in lifting their bodies clear of the water, and if many are together, and they are driven up by a boat, the nearest birds will spring first and pass the farthest from you before the latter take wing.

Like all DIVING-DUCKS, by reason of their short wings, SCAUP cannot rise into the air without first scurrying for many yards over the water against the wind, with their feet in motion as if running, and their wings beating rapidly along the surface. This is very noticeable when the sea is *calm*, though if it is *rough* these ducks can spring off the waves and take flight with little difficulty. If, therefore, it should happen that you are sailing or paddling to SCAUP or other DIVING-DUCKS, approach them at a right angle to the wind, and steer a course that would, if continued,

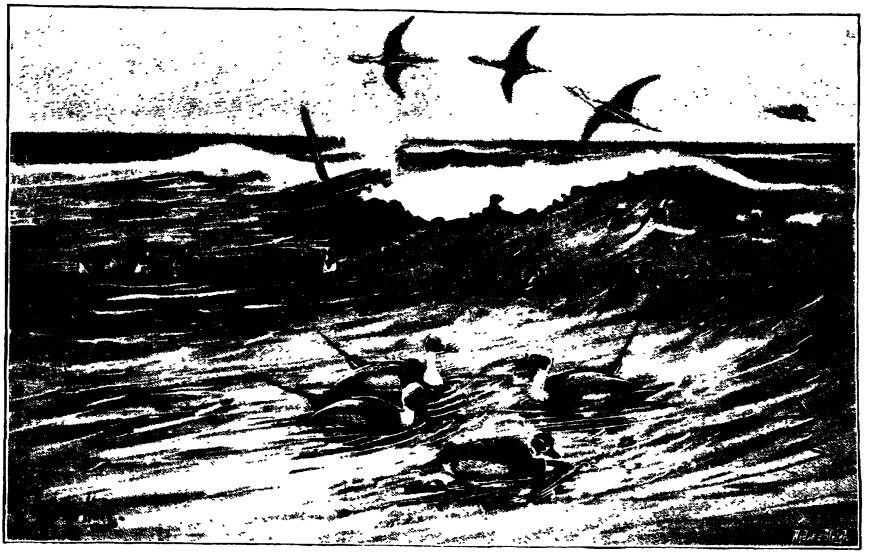
take you fifty yards ahead of the birds; they are then pretty sure to give you a shot as they cross the bows of your craft. The golden rule in killing a DIVING-DUCK is to fire at it on the wing and *not* on the water, for if fired at on the wing you have the entire bird as a mark to aim at, and from its slow and low flight as it rises off the surface, generally an easy shot too. If, on the other hand, you shoot at DIVING-DUCKS as they *swim*, you will probably (from their habit of submerging their bodies when suspicious) have only their heads to aim at—a poor target at best, and, with an ordinary shoulder-gun, an almost invulnerable one at forty yards.

If you chance to see DIVING-DUCKS, and especially SCAUP, swimming in a narrow creek that runs inland from the main tide, you are certain of a shot if, as you row up its centre, either shore is within range of your gun, for the birds on rising will follow the course of the creek in their flight back to the open water, and will even pass close to you rather than fly over the land.

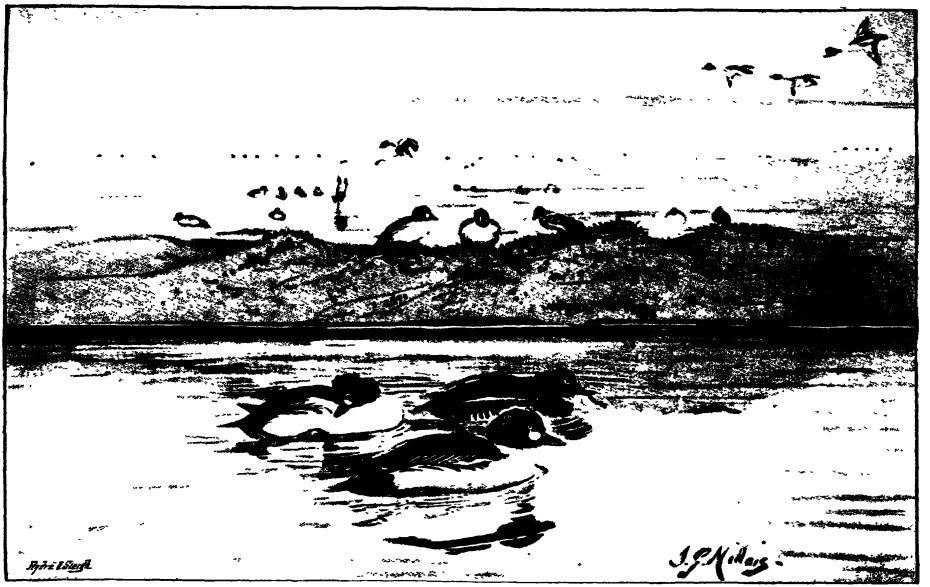
LONG-TAILED DUCK

Local names.—CALLOO, LONGTAIL, ICE DUCK.
[Often miscalled 'Pintail' in Scotland.]

Length.—22 to 26 inches including the long central tail-feathers, which sometimes project beyond the others for 5 inches.



LONG-TAILED DUCK


J. C. Kellogg

THE TUFTED DUCK

Local names.—LITTLE BLACK DIVER, WHITE-SIDED DIVER, BLACK AND WHITE DIVER, and sometimes, from the colour of its eyes, 'GOLDEN-EYE.'

Length.—16 to 17 inches.

Weight.—1 lb. 10 oz. to 1 lb. 14 oz.

Markings.—The adult male has the head, neck, back, wings, breast, and tail, *black*; the head and neck being glossy and shaded with *purple*. The sides, and the under-parts from the breast to near the tail, *white*; a narrow band, almost crossing the wing, also *white*. The eyes a vivid *golden-yellow*. The bill *slate grey*. The legs and toes *slate blue*.

The females and young males are *dark brown* on the head, neck, back, and breast; their under-parts dull *white* or *brownish-grey*; occasionally they show a few *white* feathers on the forehead.

The adult male may always be known by the pendant crest or tuft that springs from the hind-part of the head. This crest overhangs the back of the neck, and is three inches in length. The crest of the female, or the immature of both sexes, is slight in comparison to that of the old male.

Zemlya, Northern Russia, Greenland, Siberia, and Arctic America—in fact, all round the Arctic Circle.*

The LONG-TAILED DUCK nests among herbage in the vicinity of fresh-water, where it forms a structure of grasses lined with a profusion of *dark brown* down. The eggs are *greenish* in tint.

These handsome and sprightly little Ducks are winter visitors to our Islands, arriving in the autumn. I have seen them in considerable numbers off the northern coasts of Scotland, occasionally in the north of Ireland, and a good many on the north-east coast of England, though on our southern shores the LONG-TAILED DUCK is a rare bird.

I have never seen the LONG-TAILED DUCK on fresh-water, its home being the tide. Its wild cry may be heard at night echoing along the shore, but during the day it usually sports amid the waves of the sea, or dives for sustenance among rocks and over submerged reefs which lie a mile or two from land, its food often consisting of small mollusca, especially periwinkles.

* The 'Long-tailed' is the most Arctic in its distribution of any of our well-known Ducks; its nesting haunts, with a few exceptions, are all north of the Arctic Circle, and as far as land is known to exist towards the Pole. In winter the great majority of the Long-tailed Ducks migrate only a comparatively short distance southward from their breeding quarters in the Polar regions.

THE TUFTED DUCK

Local names.—Little Black Diver, White-sided Diver, Black and White Diver, and sometimes, from the colour of its eyes, 'Golden-eye.'

Length.—16 to 17 inches.

Weight.—1 lb. 10 oz. to 1 lb. 14 oz.

Markings.—The adult male has the head, neck, back, wings, breast, and tail, *black*; the head and neck being glossy and shaded with *purple*. The sides, and the under-parts from the breast to near the tail, *white*; a narrow band, almost crossing the wing, also *white*. The eyes a vivid *golden-yellow*. The bill *slate grey*. The legs and toes *slate blue*.

The females and young males are *dark brown* on the head, neck, back, and breast; their under-parts dull *white* or *brownish-grey*; occasionally they show a few *white* feathers on the forehead.

The adult male may always be known by the pendant crest or tuft that springs from the hind-part of the head. This crest overhangs the back of the neck, and is three inches in length. The crest of the female, or the immature of both sexes, is slight in comparison to that of the old male.

Nests.—The TUFTED DUCK breeds rather freely in parts of our Islands. I have found its nest on the shores of many of the lakes of Ireland and Scotland, and in the Midlands, especially in Nottinghamshire, it nests in considerable numbers. Abroad, the TUFTED DUCK nests, chiefly below the Arctic Circle, in Norway, Sweden and Finland. It also breeds in Northern and Central Russia; in Northern Germany; and abundantly in Southern Siberia.

The nest is placed among vegetation in the vicinity of lakes and meres. The eggs are from eight to twelve in number, and *greenish-buff* in tint.

Excepting the EIDER DUCK, WILD-DUCK and TEAL, the TUFTED DUCK is more numerous as a resident in the British Islands than any other species of Duck.

It is a very handsome, lively little bird, and its brilliant yellow eyes offer a striking contrast to the rich dark plumage of its head and neck. It is common in winter to the fresh-waters of Ireland and Scotland, where I have often seen many scores of TUFTED DUCKS diving about the shores of the larger lakes.

I have noticed TUFTED DUCKS on the coast in autumn in small clusters of five to seven, but they soon leave for their favourite resorts inland. During the winter I have seldom, except in severe frost, met with these birds on the tide, and then never on the open sea, but always in the shallows of a harbour or estuary.

GOLDEN EYE

TUFTED DUCK

THE GOLDEN-EYE

Local names.—MAGPIE DIVER, RATTLE WING, WHISTLER, WHITE-FACED DUNBIRD.

Length.—18 to 19 inches.

Weight.—2 lbs. 2 oz. to 2 lbs. 6 oz.

Markings.—The adult male has the head and upper part of the neck *black*, much glossed with *green*; the feathers on the top of the head being elongated into a slight crest. A patch of *white*, the size of a shilling, just *below* and *between* each eye and the base of the bill. The wings *black* with a large amount of *white* on them. The lower neck, breast, and all the under-parts to the tail, *white*. The back *black*. The eyes *bright golden-yellow*. The bill *black*. The legs and toes *yellow*.

The female and young male have the head and neck *dark brown*, with a *white* collar round the neck, but they have no patch of *white* at the base of the bill. The under-parts *white*, mottled on the breast with *dull grey*. The shoulders and sides *dull grey*, with paler edgings to the feathers. The back *greyish-black*, the feathers of the upper back with paler edgings. The eyes as bright a *yellow* as in the adult male.

Nests.—Chiefly north of or near the Arctic Circle, in Norway, Sweden, Lapland, Finland, Russia, Siberia and North America, a few nesting as far south as Northern Germany. The Golden-eye builds her nest in holes in trees, and by reason of this habit does not breed north of the forest growth. In Iceland, however, where there are no suitable trees, a few of these Ducks nest in holes and crevices in the ground. The eggs are *bright green* in colour, and about a dozen in number.

This duck is a more or less common winter visitor to both the fresh and tidal waters of England, Scotland, and Ireland; in the latter country, in late autumn, I have seen a couple of hundred together on some of the southern estuaries, often without one full-plumaged male among them.

The adult male of the Golden-eye is readily identified by the white spot near the eye, and by its black and white, or pied, dress; it is a strikingly handsome bird, but is not easy to obtain in mature plumage.

There is no wilder Duck than the Golden-eye, or one more difficult to obtain if wounded. It is locally called the Rattle Wing or Whistler, from the loud noise it produces with its short stiff wings as it flies, and particularly as it rises off the water.

FERRUGINOUS DUCK

Length.—16 to 17 inches.

Weight.—1 lb. 6 oz. to 1 lb. 8 oz.

Markings.—The adult male of the FERRUGINOUS DUCK, though considerably smaller in size than the male of the POCHARD, somewhat resembles the latter in shape. It has, however, the head and neck *chestnut brown* (not *chestnut red* as in the POCHARD), and its back and shoulders are *brown* (those of the POCHARD are *light grey* waved with *white* and *black*). The FERRUGINOUS DUCK may also be known by its very characteristic *white* eye (the eye of the common POCHARD being *red*); it has, besides, a well-defined bar of *white* on the wing, which is not present in the POCHARD.

The female resembles the male in plumage, but is duller generally in colour, and is also smaller, scarcely exceeding a TEAL in size. The FERRUGINOUS DUCK is sometimes called the WHITE-EYED POCHARD.

Nests.—In many parts of Central and Southern Europe, and temperate Asia. This Duck is said to breed very numerously in Turkestan and Kashmir. The nest is placed among sedge in marshes, or in the vicinity of water. The eggs are about a dozen in number, and are *deep buff* in colour.

The FERRUGINOUS DUCK is rare to our Islands (in Scotland and Ireland *very* rare), though, as DIVING-DUCKS are frequently passed on the coast by the fowler as not worthy of pursuit, it is possible that this species may be a more frequent visitor than is suspected.

However, out of many thousand British-killed Ducks that I have examined during the past score years or so, I have only seen six of these birds, two of which I shot off the south-east coast of Ireland in October 1879.

RED-CRESTED POCHARD

Length.—21 to 22 inches.

Weight.—2 lbs. 6 oz. to 2 lbs. 10 oz.

Markings.—The adult male has the bill bright *crimson* tipped with *white* (the bill of the COMMON POCHARD is *black* and *slate blue*). The head with its large dense crest, and the upper neck, *pale chestnut*. The lower neck, breast, middle of the abdomen, and lower back, *brownish-black*; the rest of the back *yellowish-brown*; the sides *white*, tinged with *pink*. This duck is a good deal *larger* than the COMMON POCHARD, and has distinct patches of *white* on the wing not present in its smaller relative. The legs and toes are *red*, the webs *blackish*.

The adult female has the crown of the head *dark brown*, and crestless; the sides of the throat, cheeks,

and neck, *greyish-white*. The upper-parts and breast *pale rufous-brown*; the under-parts below the breast, *greyish-brown*; wing-spot, *dull white*; bill and feet, *reddish-brown*.

The young males in first plumage resemble the old female, but soon assume male characters.

Nests.—In the centre and south of Germany; in the countries of Southern Europe bordering the Mediterranean; in the valley of the Danube; and in some districts of South Russia. Also in Northern Africa; and in Asia in North Persia and Turkestan.

The nest is placed among sedges (sometimes under thick bushes) near water, and is lined and edged with an abundance of *greyish-brown* down. The eggs are about ten in number, and of a clear *pale green* colour.

I have, in the winter season, shot numbers of these Ducks in Central India, by having them driven to me from one lake to another, whilst I lay in concealment between the two. The RED-CRESTED POCHARD is a *very rare* straggler to the British Islands, having only occurred therein about a score times (once in Ireland and once in Scotland). The only RED-CRESTED POCHARD as yet recorded from Ireland I obtained (in the flesh) on January 20, 1881. It was killed near the town of Tralee by the fowler from whom I procured it, and the bird is now in my collection.

BUFFEL-HEADED DUCK

A North American duck that has occurred but four times in our Islands (twice in England and twice in Scotland, but not in Ireland). It is very like the GOLDEN-EYE in plumage, though much smaller, being only 14 to 15 inches in length, and but a pound in weight. The adult male BUFFEL-HEADED DUCK has a *large* white triangular patch *behind* each eye, extending to the back of the head, where it forms a crest. (The male of the common GOLDEN-EYE has a *small* white spot in *front* of each eye.) The female has the head, neck, and upper-parts, dull *greyish-brown*; a *white* spot behind the eye. The under-parts *white*, tinged with *brownish-grey* on the breast and sides.

This Duck is sometimes termed the BUFFEL-HEADED GOLDEN-EYE. It is known in America as the BUTTER BALL.

HARLEQUIN DUCK

Length.—17 inches.

This Duck has been obtained some half-dozen times in our Islands in autumn and winter. It is an Eastern Asiatic and North American bird which dwells as near to us as Iceland, where it is a resident and abundant species.

The adult male, as its name implies, shows many

contrasts in colour and markings. The upper plumage is chiefly *blue black*. The breast and abdomen *dark brown*. A stripe on each side of the top of the head, and the entire sides of the body, *bright chestnut*.

The markings are very singular and consist of a series of *white* spots, stripes and belts.

Thus there is a large *white* patch on each side of the base of the bill; a small spot of *white* on the cheeks behind each eye; a stripe of *white* above the eyes, and another down the hind-neck on either side. Three thin curving bands of *white*, like partial collars or belts —one on the lower neck and one on each side of the breast; and a *white* stripe on the sides of the back above the wings, which latter are also marked with *white*.

The eyes *orange*; the wing spot *purple*.

The female is a plain little Duck, in length about fifteen inches. She has a patch of *dull white* on the forehead, and a spot of the same shade behind each eye. Above, she is *brown* of a nearly uniform shade. Her fore-neck and breast are mottled with *brown*, the remainder of her under-parts being *whitish*.

The colouration of the male in summer is much duller than in winter, the characteristic markings being, in the former season, only imperfectly indicated.

LETTER XV

DIVING-DUCKS (continued)

THE COMMON EIDER

Length.—24 to 26 inches.

Weight.—5 lbs. to 5½ lbs. (a very fine one, 5¾ lbs. to 6 lbs.)

Markings.—The adult male has the forehead, the point of feathers that runs down the centre of the bill half-way to the nostrils, and the sides of the crown to just below the eyes, *black*. A *white* line down the centre of the crown. The back of the head and the hind-cheeks, *pale green*. Cheeks, throat, neck, breast, upper back, upper part of wings, and a patch on each side of the tail, *white*. The breast tinged with *pinkish-buff*. The long, curved, drooping feathers of the wings, *yellowish-white*. Remainder of wings *brownish-black*. Under-parts, lower back, and tail, *black*. Bill legs, and feet, *olive green*.

The plumage of the female is *pale brown* slightly tinged with *rufous*, paler on the head and neck, darker on the under-parts. The head and neck streaked with dusky; the upper surface of the body, and the sides, barred with *black*, with pale edgings to the feathers.

Nests.—The Common Eider nests on the Farne Islands and on Holy Island (Northumberland), but not elsewhere in the British Islands, except on the seaboard of Scotland. In the latter country it breeds very freely in many localities, chiefly in the north and

east, though it is numerous in summer on some of the Hebrides, as well as on Colonsay and Islay, in the west. Abroad, the Common Eider nests abundantly on the coast of Norway (where I have seen large numbers of young birds with their parents swimming about the shores of the Fjords in July) as well as in the Faröes,

Denmark, Iceland, Spitzbergen, Franz-Josef Land, Novaya-Zemlya; on the north-west coast of Siberia; in Greenland; and in North-Eastern America.

The nest of the Eider is composed of dry stems and grasses, and is placed among rocks or herbage near the sea. When the full clutch of five to eight *pale green* eggs has been laid, the nest is lined and edged with a profusion of *dark grey* down, plucked from the breast of the female.

The Common Eider, whether a male, a female, or an immature bird, may be readily known by its heavy elongated head, and by its great size, for it is nearly twice as large as any other of our Ducks.

I have rarely seen Eider Ducks on the coast of England and Wales, south of the Humber on the east, and the estuary of the Dee on the west; and though a few Eider Ducks wander down to our south-eastern coast, they are exceptional visitors.

In Ireland the Eider Duck is *very* seldom seen.*

Note on Eider Down

The Eider, like all other ducks, plucks the down off her breast to line her nest with shortly before she commences to sit on her eggs. This down, from its elasticity, lightness, and softness, is one of the best non-conductors of heat known, and whether utilised by mortals

* The Eider in winter is the most sea-frequenting of all our Ducks and Geese. A Brent Goose is even occasionally seen inland; but the Eider Duck, except in the nesting season, never leaves the tide or flies overland. I have never heard of an Eider Duck being observed on fresh-water in winter.

as a bed-quilt, or by the EIDER DUCK as a covering for her eggs, it is unrivalled. Eider down contains heated air among its fibres, just as a sponge holds water in its interstices, and, as a result, if used to cover any object *already* warm, it prevents the heat escaping therefrom for a long period. To prove its properties of retaining heat, I have often successfully carried for many hours in a basket of Eider down the eggs of WILD-DUCK and TEAL, which I had taken when near hatching, with a view to setting them under hens on arriving home.

Note on the Nesting of the Common Eider

My friend Mr. W. H. St. Quintin of Scampston Hall, Yorkshire (whose knowledge of British Wildfowl is, I may safely assert, almost unrivalled), has succeeded in breeding Eiders. I cannot do better than quote what he says on this subject: 'My oldest Eider Duck has been at Scampston 10 years this summer (1896). Only this one old Duck has nested—she has not, I think, missed a season since 1889, laying every year, usually 3 eggs, once I believe 4. I have now three drakes and five ducks. The old birds are fed on various meals, also on fresh ox-liver and sometimes rabbit-liver. The young are reared on meal, as well as on earth-worms, gathered, by the aid of a lantern, on dewy nights. My Eiders will eat a little bread sometimes, but never fish or shell-fish. The duck sits 28 days. It is an absolute fact that for several seasons, and for all I know always, my old Eider sits the whole 28 days without leaving the nest! The first time or two that she nested we were anxious about the bird when we found she would not come off her nest to feed (all our other sitting Ducks do). We used to place pans of water, and food, near her, but when we thought this was not touched we made the matter certain by laying the bits of liver and meal in patterns in the pan. In the water we put grass-bents so that the Duck could not drink without disturbing the squares and crosses which we made with the grass-bents on the surface of the liquid. When we found the food and water were never touched we took the pans away, and the end of it was the old Duck used, long before she came off, to be buried overhead, nest and all, in a mass of luxuriant chickweed that grew up round the clump of Pampas grass in which she was sitting.

'It is a curious fact that my Eiders shed their flight-feathers and their tail-feathers all at once; this they do in a night, or else between a morning and an evening.'

THE KING EIDER

A wanderer from far northern regions, that nests on Novaya-Zemlya, and the shores and islands of Asia and America that are within the Arctic Circle. The KING EIDER, though more often seen, has only been killed on about fifteen occasions in the British Islands, chiefly in spring.

The adult male of the KING EIDER may at once be distinguished by the remarkable *orange-coloured* protuberance at the base of its bill. This protuberance is large and compressed, and rises nearly to the same level as the top of the head. The KING EIDER is about the same size as the COMMON EIDER, but the *white* on the back is confined to the upper half, the lower half of the back being *black*. The curving feathers that droop across its closed wings are *black*, these in the COMMON EIDER being *yellowish-white*. The legs, and toes, *orange-red*. The head and upper part of the hind-neck, *bluish-grey*; the cheeks *pale green*; the throat *creamy-white*; the under-parts, below the breast, as *black* as in the COMMON EIDER, and with also a *white* patch on each flank.

The female is smaller, and more tinged with *red* than is the female of the COMMON EIDER, from which bird she may also be known by the point of feathers on her upper bill reaching the nostrils, a peculiarity which is equally characteristic of the male.

STELLER'S EIDER

Is another wanderer from the shores of the Arctic Ocean that is even more rare with us than the KING EIDER, for it has only been obtained *twice* in our Islands. It is much the smallest of the three EIDER DUCKS, being only 19 inches in length, or about the size of a WIGEON. The adult male has the head and upper neck *silvery-white*, a tuft of *green* at the back of the head level with the eye, and a patch of *green* on each side of the *base* of the bill. The chin *black*, and a collar of *purplish-black* round the neck. The breast and abdomen *reddish-chestnut*. The wing spot dark *glossy-blue*, bordered above and below by a *white* band.

THE COMMON SCOTER

Local name.—BLACK DUCK.

Length.—19 to 21 inches.

Weight.—2 lbs. 10 oz. to 2 lbs. 14 oz.

Markings.—The adult male of the COMMON SCOTER is a uniform *glossy-black*; excepting the upper bill, which has a narrow line of *orange* dividing the con-

spicuous knob at its base, and an *orange* patch on its centre round the nostrils. Eyes *dark brown*. The legs and feet *dusky black*.

The female is *dark brown*, with the cheeks and sides of the neck *greyish*, and the chin *whitish*. Her

COMMON SCOTER VELVET SCOTER SURF SCOTER

bill differs from that of the male, for it has not the orange patch, or the knob at the base.*

Nests.—A few pairs of the COMMON SCOTER breed

* I have always found the young in their first winter have a good deal of white on the front of the neck, and on the breast.

in Inverness, Sutherland, Ross, and Caithness. I have reared birds from eggs I have taken in the latter county.

Abroad, the Common Scoter nests sparingly in Iceland; and numerously, north of the Arctic Circle, in Europe and Western Siberia.

The nest of the Common Scoter is placed in cover near fresh-water, or on islands in lakes. It is composed of dry grasses and moss, and is lined with *greyish* down. The eggs are *yellowish-white* in tint, and from six to nine in number.

I have seen vast numbers of these worthless Ducks, in winter, on the shallow seas off Northern France, Belgium, and South Holland; as well as on the eastern shores of England, and on the north-east coast of Ireland.

The Common Scoter is almost entirely a winter visitor to the British Islands, and is then essentially a sea-frequenting Duck, obtaining its food (shell-fish) by diving about submerged rocks and sand-banks. On inland waters I have never met with it, and not often, save a few scattered birds, in our estuaries and harbours.

Near Ostend, I have seen the sea black with these Scoters, quite 10,000 being sometimes in view at one time.

THE VELVET SCOTER

Local name.—Velvet Duck.

Length.—21 to 22 inches.

Weight.—3 lbs. 6 oz. to 3 lbs. 10 oz.

Markings.—The plumage of the adult male is a rich velvety *black* tinted with *purple*, and relieved by a *small white spot* just behind and below each eye, and by a very prominent long *white bar* across either wing.

The upper bill *pale orange*, with a *black* basal knob and lower edges, and crossed diagonally from each nostril to near the tip by a narrow *black* line. The eyes *light brown*. The legs and toes *dull orange*, with *dusky* webs.

Its superior size, and especially the large *white* bar on its wing (the latter an unerring mark of identification), are quite sufficient to distinguish this bird from the Surf or the Common Scoter (see p. 176).

The female and young are *dark brown*, paler beneath; have a *white bar* on the wing similar to the adult male, but smaller; and a *dull white* patch behind and below each eye.

Nests.—The Velvet Scoter is *supposed* to occa-

sionally nest in the north of Scotland. Its breeding haunts are on the inland waters of Northern Europe and Asia, chiefly north of the Arctic Circle. The nest and eggs are similar to those of the Common Scoter, the eggs being rather larger.

I have seen the Velvet Scoter in small gatherings, or as single birds, on many parts of the coast of the British Islands, the sea-board of Ireland excepted.

Though an uncommon Duck generally to our shores, it is not rare on the east coast of England and Scotland during the autumn and winter.

THE SURF SCOTER

Length.—19 to 21 inches.

Weight.—2 lbs. 6 oz. to 2 lbs. 10 oz.

Markings.—The adult male has the body as *black* as the other Scoters, but this bird may be at once known by the broad patch of *white* on its forehead between the eyes, as well as by the streak of *white* down the back of its neck (see p. 176).

The bill chiefly *orange red*. The upper bill has a sloping protuberance, and a conspicuous *black* patch, on

each side, at its base. The legs and toes *orange*, with *dusky* webs. The eyes, *pale yellow* to nearly *white*.

The female, and young in their first year, are *dull brown*, but have the *white* streak on the back of the neck, though it is less noticeable in their case than in the adult male.

Nests.—In Arctic America, breeding on or near lakes, after the manner of the other SCOTERS.

The SURF SCOTER is a straggler from North America, that has been obtained about a score times in the British Islands, in the autumn, winter, and spring.

THE GOOSANDER

Local name.—SAW BILL (a general name for this bird and the RED-BREASTED MERGANSER).

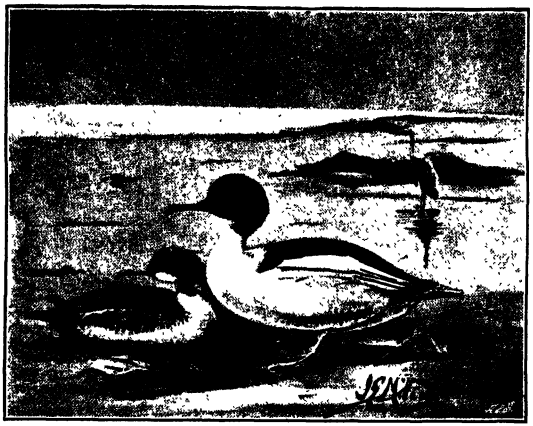
Length.—26 to 27 inches.

Weight.—3 lbs. 12 oz. to 4 lbs.

Markings.—The adult male has the head and upper neck *glossy greenish-black*, with a slight droop-

ing crest. The lower neck, breast, and all the under-parts to near the tail, *white*, delicately shaded with *salmon pink*. The wings *black* and *white*, the latter colour predominating. The upper back *black*; the lower part of the back and the tail, *ash grey*. The bill *vermilion*. The eyes *red*. The legs and toes *orange*.

The female has the head and upper neck *chestnut*,

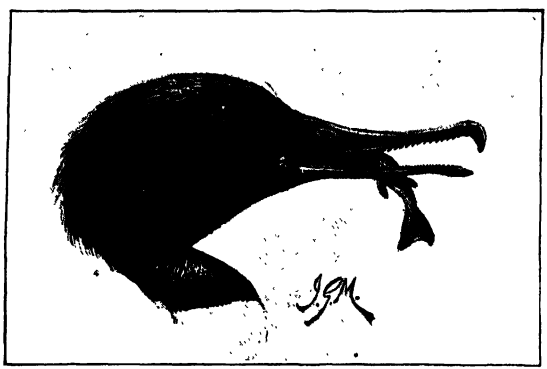


Goosander

with a much longer crest than the male. The chin, lower neck, breast, and the rest of the under-parts, *white*, but shaded with *grey* on the breast and flanks. The back, wings, and upper plumage, chiefly *ash grey*. Length 23 to 24 inches.*

* Young birds in their first winter resemble the adult females.

The bill of the GOOSANDER and of the RED-BREASTED MERGANSER is, as shown below, long and slender, and hooked downwards at the end. It has strong teeth-like serrations resembling a saw, that incline backwards as do the teeth of a pike, and are well devised to prevent the escape of fish when seized by the bird.



HEAD OF GOOSANDER (Showing bill of the Mergansers)

Nests.—In the British Isles this bird breeds only in the Highlands of Scotland, where it has now become a not uncommon nesting species in some districts. Abroad, the GOOSANDER nests in Iceland, Denmark, North-Eastern Germany, Norway, Sweden, Finland, Northern Russia, Siberia, and Central Asia.

The Goosander forms its nest in the crevices of rocks, and under the roots and in the hollows of trees; laying its dozen *buff-coloured* eggs on a bed of very light *greyish* down, mixed with particles of dry stems and grasses.

Except in its breeding haunts, the Goosander is rather scarce in the British Islands, though I have usually seen little parties of three to five every winter on the coast. On our western and southern shores it is not often obtained, but on both sides of Scotland, and in the east of England, a few Goosanders may occasionally be noticed diving about the entrances of the harbours and estuaries. This bird is somewhat rare in Ireland unless the winter be very severe. The Goosander, save in hard frost, is, in my experience, more frequently killed inland on rivers and lakes, where it feeds on trout and other fish, than on tidal waters.*

The male Goosander in its strikingly handsome adult plumage is, however, much less seldom shot in England than in Scotland; the specimens I have seen and killed in England being mostly immature.

* I have taken a trout of seven inches in length from the stomach of a Goosander, and found the partly digested remains of two other fish of similar size in the same bird. When the nest of the Goosander is deep down in a hollow tree, as is often the case, the female can only approach and leave her nest with some difficulty, and a considerable amount of 'shuffling' with her legs and wings. The young, it is quite clear, must in such cases be introduced to the outer world by being carried thither in the bill of their mother.

THE RED-BREASTED MERGANSER

Local names.—SAW-BILL, SPEAR WIGEON. (In Ireland SHELD-DUCK.)

Length.—22 to 24 inches.

Weight.—2 lbs. 10 oz. to 2 lbs. 14 oz.

Markings.—The adult male has the head and upper neck *glossy blackish-green*, like the GOOSANDER, but with a much longer crest than the latter bird. A conspicuous *white* collar passes almost entirely round the middle of the neck. The lower neck and upper breast *reddish-brown* streaked with *black*; the lower breast and the rest of the under-parts *white*, without the pink shading of the GOOSANDER. The upper part of the back *black*; the lower back and flanks *grey*, marked with fine *dusky* cross-lines. On either side, near the shoulder of each wing, is a conspicuous patch of *white* feathers with broad *black* margins. Wings *black* and *white*, chiefly the latter. The bill and eyes *red*. The legs and toes *orange*.

The female, and the young in their first winter, closely resemble in plumage the female and young of the GOOSANDER, but are about a third smaller, have the head darker in colour, and the throat *reddish*. (The female GOOSANDER has the throat *white*.)

RED-BREASTED MERGANSER

Nests.—Freely (usually in the vicinity of the sea) on the mainland and islands of the north and west of Scotland, and in considerable numbers in the west of Ireland. Abroad, the RED-BREASTED MERGANSER breeds in the Farŏe Islands, Iceland, Greenland, Norway, Sweden, Northern Russia, Siberia, and North America.

The nest, composed of grasses, roots, and *pale grey* down, is nearly always at some little distance from the water, usually well concealed in heather or long grass, and is often placed on an eminence of fifty or sixty feet in height. The eggs are of a *dull cream* colour, and eight or nine in number.

The RED-BREASTED is by far the most numerous of the British 'Saw-bills,' but to England and Wales it is only a winter visitor. It frequents many parts of our coast in considerable numbers, but, unlike the GOOSANDER, is seldom seen in winter on fresh-waters inland. On the south coast of Ireland I have often seen two to three hundred of these birds swimming together, and on the coast of England (excepting the east) and on both sides of Scotland it is more or less common in winter.

On the lochs near the western sea-board of Scotland the RED-BREASTED MERGANSER nests freely. On one loch alone in the west of Scotland I have known of twenty to thirty nests, and sometimes three or more on a small island of but an acre or two in extent.

When RED-BREASTED MERGANSERS nest on the islands or shores of a lake near the sea, and a river, with falls and rapids, runs from the former into the tide, it is interesting to watch the old birds pilot their young to the salt-water, which they usually do about ten days after they are hatched.

I have often watched an old female, with her young, swim down a river till she arrived at broken water. She would then gather her brood round her and, if all was quiet, land and walk with her chicks past the waves, to go afloat again where the surface was calm; but if fishermen or dogs, or indeed anything was present to cause alarm, old and young would career down the rapids, the latter rolling head over heels in their passage.

When the broods at length reach the safety of the tide, many of the old females after a few days desert their charges, and thirty or forty young birds may be seen swimming about the sheltered creeks and bays under the protection of one parent.*

Last summer, when fishing in a pool at the foot of a high waterfall in the west of Scotland, a female RED-BREASTED MERGANSER and her eight or ten young ones came tumbling close to me over the top of the fall, which was perpendicular, and at least twelve feet high.

The old bird and her young passed out of my

* Young Eiders may also be seen, a score together, paddling about with but one old bird leading them.

view down stream, excepting one of the brood that was caught in an eddy near the side of the fall, and here it was tossed and spun round like a cork without any power of escape, struggling, and fighting for its life in a half-drowned state. After nearly an hour's work in cutting away bushes, bringing a ladder, and laying stepping stones in the water, I at length, by means of a noose at the end of my salmon rod, relieved the little bird from its perilous position. As it started to paddle away down stream, I only then realised that the parent Merganser was sitting on a stone in the stream within a dozen yards of me. Having missed one of her family, she had returned to seek it, and had, no doubt, been an interested spectator of its rescue, for she quickly joined it in the water and swam off in its company.

THE SMEW

Length. - 17 to 18 inches.

Weight.—1 lb. 8 oz. to 1 lb. 10 oz.

Markings.—The adult male has the head and neck *silvery-white*. A crest of short feathers extends from the crown to the nape of the neck, the upper plumes of which are *white*, the remainder chiefly *greenish-*

black, these latter giving the appearance of a *black* tuft on the back of the head. Round each eye, and extending to the base of the bill, a *greenish-black* patch the size of a shilling. The back *black*. All the under-parts *white*, with two curved narrow *black* bands on each side, one extending from the back to the shoul-

SMEW

ders, the other in front of the wing. The bill dark *slate blue*, and only 1¼ inch in length, or much shorter than in the two MERGANSERS just described (the bill of the GOOSANDER and of the RED-BREASTED MERGANSER is *red*). The legs and feet *slate grey*. The eyes *red*.

The general plumage *black* and *white*, the latter predominating.

The female is smaller than the male; and has the head, its crest, and the back of the neck, *chestnut*; a *black* patch from the eye to the bill, like the male, though it is less noticeable on her darker plumage. The back chiefly *slate grey*; the under-parts from chin to tail *white*, except a collar of *ash grey* round the neck, and the flanks, which are shaded with *grey*.

Nests.—In the North of Russia, and in Siberia up to the limit of forest growth.

The Smew breeds in hollow trees, laying its *cream-coloured* eggs on a bed of *white* down.

The Smew is an uncommon winter visitor to the British Islands; a few of these Ducks may occasionally be found within the estuaries of, and on some of the inland waters near, the east coast of England and Scotland. On our western shores and in Ireland the Smew is seldom obtained. The adult male, in its handsome black and white plumage, is difficult to procure, females and young birds being more frequently killed.

The Smew is much smaller than the Goosander or the Red-breasted Merganser, and its female is but little larger than a Teal. The Smew has the unmistakable serrated bill of the Merganser tribe to which it belongs.

THE HOODED MERGANSER

Length.—18 to 19 inches.

Weight.—1 lb. 10 oz. to 1 lb. 12 oz.

Markings.—The adult male has the head and upper neck *black*, shaded with *purple* and *green*. A *fan-shaped* triangular patch of *white* behind each eye, broadly surmounted and edged with *black*, and forming a large crest which projects considerably beyond the back of the head. The general plumage mostly *black* and *white*, with two curving *black* bands on each side of the lower neck near the shoulders of the wings. The bill, long, *black*, and formed and 'toothed' like those of the other MERGANSERS. The eyes *yellow*. The legs and feet *dark red*.

The female has the head, hind-neck, wings, and back, *dark brown*. The crest and the top of the head *brown* tinged with *red*, but without any *white* or *black*. The under-parts *white*, except the neck and upper breast, which are *pale brown*.

The crest of the male HOODED MERGANSER is rounded and dense, but that of the female shows the elongated drooping feathers characteristic of the crest of both sexes of the other species of MERGANSERS.

Nests.—In North America, within the limits of forest growth, placing its nest of *dark-coloured* down,

and laying its almost round *ivory-coloured* eggs, in hollow trees.

This Merganser, a chance straggler from North America, has been obtained in the British Islands

Hooded Merganser

on six or seven occasions; chiefly off the western coast of Ireland, where it is naturally more likely to be found than elsewhere on our shores, when it happens to cross the wide Atlantic.

I had the good fortune to kill two of these birds in the south of Ireland in December 1878, and a third in the very severe frost of January 1881, on the coast of Kerry, after a heavy gale from the north-west. All three birds were shot on the tide. One was an

adult male and two were females. In my anxiety to obtain the former I fired at such close quarters that I cut its head clean off, but it was afterwards fixed to the body when the bird was preserved.

The Hooded Merganser is a little larger than the Smew.

Note on the plumage of Ducks

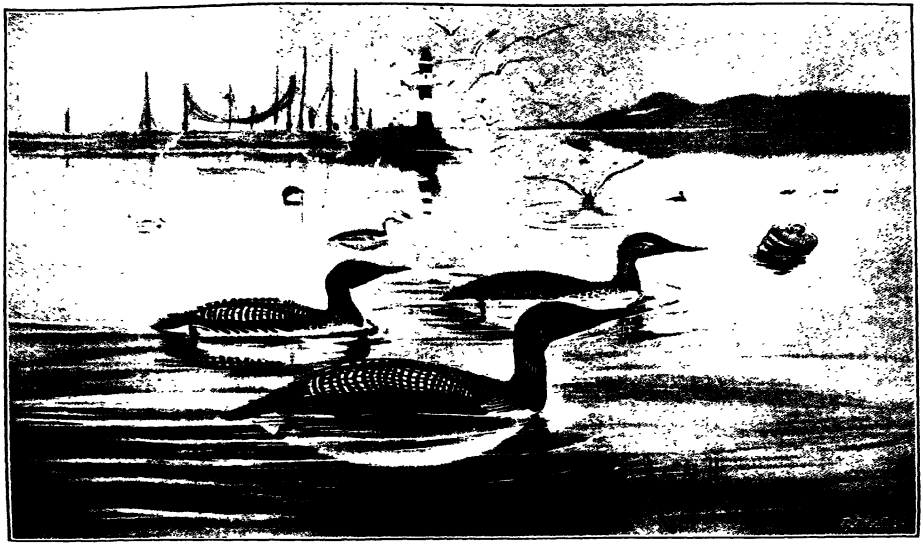
The adult males of all the Ducks described (except the Sheldrake, where both sexes are alike) assume near the close of summer (at the end of the breeding season), and discard in late autumn or early winter, a post-nuptial or 'eclipse' dress which more or less closely resembles that of their females. During the remainder of the year their plumage is the full dress of winter.

[The male Long-tailed Duck is a notable exception to this last rule, for, like many of the waders, he has a distinct summer plumage which he assumes in the spring *before* the breeding season.]

The plumage of the females never varies.

The young birds of *both sexes* in their first plumage, which they put on a few weeks after they are out of the egg, are alike in appearance and resemble the mother bird.

The young males, however, acquire to some extent their characteristic masculine feather-ornaments during their first year.



BLACK-THROATED DIVER GREAT NORTHERN DIVER RED-THROATED DIVER

LETTER XVI

SEA-DIVERS

THE GREAT NORTHERN DIVER

Local names.—LOON, HERRING LOON.

Length.—30 to 33 inches.

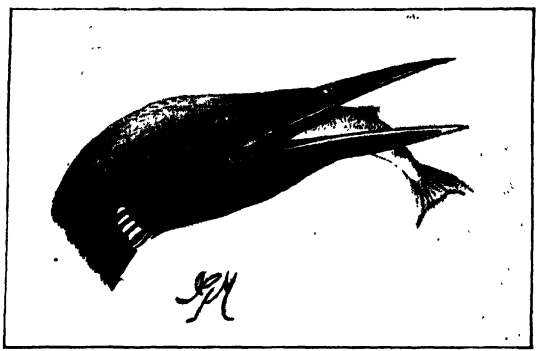
Weight.—9 lbs. to 12 lbs.*

Markings.—The illustration on the opposite page will enable you to identify this bird.

The *white* patches (striped vertically with narrow *black* lines) on the velvet *black* throat and neck, and the numerous large lozenge-shaped *white* spots on the back, give the adult GREAT NORTHERN DIVER

* Great Northern Divers vary very much in size; I have killed adults from as low as 8 lbs. to as high as 13 lbs. The Great Northern Diver has a voracious appetite, and will gorge with small fish, when these are in shoals, till it becomes as round and fat as a seal.

a very handsome appearance, but these markings are only perfect in the late spring, summer and autumn. In winter, the back, shoulders, head, and hind-neck are an almost uniform *brownish-black*; the *white* spots on the back and wings not nearly so bright as in summer. The throat, front of the neck, and all the under-parts, *white*.



HEAD OF GREAT NORTHERN DIVER

The head of the GREAT NORTHERN DIVER is here given, and shows the long, powerful, dagger-like form of bill, opening to below the eye, that is characteristic of this bird and of the other two SEA-DIVERS next described.

Nests.—The GREAT NORTHERN DIVER is *supposed* to have nested in recent years in the west and north of

Scotland. Abroad, it breeds freely in Iceland; and (chiefly below the Arctic Circle) in Greenland and North America; but is not known to nest in Europe or Asia.

The nest is a mere hollow scratched in the turf almost at the very edge of fresh-water lakes, frequently on an island. Two large, long, *olive-brown* eggs, spotted with *black*, are laid by this bird.

The Great Northern Diver is fairly common, during winter, to the coasts of the British Islands; but adults in *complete* summer dress, as depicted in the illustration facing p. 193, are rarely seen, as they leave our shores for their northern breeding haunts before they attain this state of plumage.*

In natural history museums this bird is usually to be seen bolt upright in a glass case, but in life it cannot lift its breast clear of the ground, or rise to fly except from the water.

I once kept a Great Northern Diver (caught uninjured in a trammel-net) on a yacht for a week. The bird could move about as it liked, yet never attempted to fly, but slid along on its breast, with its wings beating the deck and its legs working as if in

* I have killed Great Northern Divers in the last week of February with their white semi-collars plainly showing, and with the black on their heads and necks assuming the green and purple gloss of summer.

the act of swimming. It became fairly tame, and bolted salted herrings whole, but its mournful cries at night disturbed the sleep of all on board, and I gladly returned the bird to its natural element.

The GREAT NORTHERN, and the other SEA-DIVERS, when pursued from a boat, submerge all but their heads, necks, and just the top of their backs, and as they dive they bend their heads slowly down to the water and quietly disappear without any splash, or bustling plunge forward, as is the custom of DIVING-DUCKS.

I have frequently seen the GREAT NORTHERN and the other SEA-DIVERS on wing in the autumn and early spring, but not often in the winter.

THE RED-THROATED DIVER

Local names.—LOON, SPRAT LOON, SPECKLED LOON, RAIN GOOSE.

Length.—22 to 24 inches.

Weight.—3½ lbs. to 4¼ lbs.

Markings.—In summer, the adult RED-THROATED DIVER has the throat a rich *chestnut red.* The top of

the head, and the back and sides of the neck, streaked with *black* and *white*. The forehead, sides of the head, neck, and chin, *ash grey*. The back, smaller wing-feathers, and tail, dark *greenish-brown*, sprinkled with *small white* spots and streaks, that are, however, neither lozenge-shaped nor nearly so large as those of the Great Northern Diver. All the under-parts below the *red* on the throat, *white*.

In winter, when these divers frequent our shores most numerously, the *red* stripe down the throat is absent in the adults for a short period.

The young birds in winter have the under-parts entirely *white*, and the feathers of the upper-parts margined with *white*.

In shape and habits, the Red-throated Diver closely resembles the other Sea-Divers, but is much smaller in size than the Great Northern.

Nests.—The Red-throated Diver nests rather freely on the islands and mainland of the north and west of Scotland, and very sparingly in the north-west of Ireland. Abroad, it breeds in the Faröes, Iceland, Greenland, Norway, Sweden, Northern Russia, Novaya-Zemlya, and Spitzbergen; and both north and south of the Arctic Circle, in Siberia, and North America.

The nesting habits resemble those of the Great Northern Diver. The two eggs are similar to the

eggs of that species, but smaller, and often of an *olive green* ground-colour.

The RED-THROATED DIVER is more or less common to the shores of the British Islands during the autumn and winter, and is the most numerous of its genus that visits us. I have often had a score in view at one time, and seen over a hundred during a day's sail, if shoals of herrings or sprats were off the coast.

In early October, and late in March, I have shot many RED-THROATED DIVERS with their red throats, from which they derive their name, fully developed; but in December and January they show no red colour on the throat. The head and hind-neck during that period being *slate grey*, spotted with *white* (not streaked, as in summer), and the back *brownish-grey*, also speckled with *white*. The under-parts, from the chin to the tail, *pure white*.

THE BLACK-THROATED DIVER

Local names.—Same as the RED-THROATED DIVER, for which, when in winter plumage, it is often mistaken.

Length.—25 to 26 inches.

Weight.—5 lbs. to 7 lbs. (Like the GREAT NORTHERN varies much in size, and I have seen birds that weighed 8 lbs.)

Markings.—In summer, the adult BLACK-THROATED DIVER has the throat *black* tinged with *purple*, in the form of two patches which are connected by a few short *white* lines at the chin. The upper part of the head, and the hind-neck, *dark* to *light grey*. The sides of the neck and of the upper breast, streaked with *black* and *white* lines. The back *black*, crossed at intervals with conspicuous bars and spots of *white*. The wings *black*, their upper halves speckled with small *white* spots. The under-parts *white*.

In winter, the head, hind-neck, and back are *blackish-brown* speckled with *white*; the *black* on the throat is absent, the under-parts from chin to tail being then entirely *white*.

Nests.—Sparingly on the fresh-water lochs of North-Western Scotland, and on some of those of Perthshire and the Outer Hebrides. Abroad, the BLACK-THROATED DIVER breeds numerously (both north and south of the Arctic Circle) in Norway, Sweden, Finland, Northern Russia, Siberia, and North America.

The BLACK-THROATED DIVER is by far the least

numerous of the three SEA-DIVERS that frequent our shores. I have only once seen this bird on the coast of Ireland. On the coasts of England and Wales it is an uncommon winter visitor, but on the northern and western sea-board of Scotland it is not so scarce at that season as elsewhere in the British Islands.

I have watched, through a telescope, the BLACK-THROATED, as well as the RED-THROATED DIVER, approach and leave their nests.

Both birds usually lay their eggs on small islands in fresh-water lochs, nearly always on smooth, level, grass-grown turf, and within a foot or two of the water's edge, and a few inches only above it.

The eggs, two in number, are placed in a slight scraped depression in the soil, and though sometimes shaded by a low bush, no constructed nest is formed round them.

The female as she visits or quits her eggs, pushes herself along on her breast, making, after a time, a track like rabbits do over wet ground, along which she slides slowly up to her nest on leaving the water.

The females of these three SEA-DIVERS are respectively similar to the males in plumage, but are somewhat less in size.

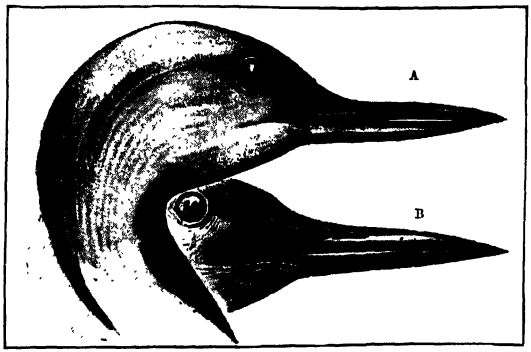
THE WHITE-BILLED NORTHERN DIVER

A wanderer from the Arctic Regions of Europe, Asia, and America, that has been obtained on but three or four occasions in the British Islands. It is superior in size to the GREAT NORTHERN DIVER, of which bird it may be regarded as an Arctic form, and from which it may be known by its having the spots on the back larger, and by its *ivory-white* bill; the bill of each of the three SEA-DIVERS that regularly haunt our shores being *black* in the case of adults, and *light brown* or *horn colour* in young birds.

Our three well-known SEA-DIVERS are easy to tell apart when in *summer* plumage. The GREAT NORTHERN you may know in *winter* from the BLACK-THROATED and RED-THROATED by the superior size of its body, and especially of its bill. As, however, the two latter birds are sometimes of similar dimensions, and are also not very unlike in colouring when in immature, or in winter dress, I give you a sketch of their heads as an aid to identification.

You will observe the upper bill of the RED-THROATED DIVER is slightly concave near its base, and that the lower bill inclines decidedly upwards from the middle to the tip; whilst the bill of the BLACK-

THROATED DIVER slopes evenly, both above and below, from its base to its point.



(A) RED-THROATED DIVER (B) BLACK-THROATED DIVER

SLAVONIAN GREBE
BLACK-NECKED GREBE

GREAT CRESTED GREBE
LITTLE GREBE
(Summer plumages)

RED-NECKED GREBE

LETTER XVII

GREBES

THE GREAT CRESTED GREBE

Local names.—TIPPET-GREBE, LOON.

Length.—21 to 23 inches.

Weight.—2 lbs. 12 oz. to 3 lbs.

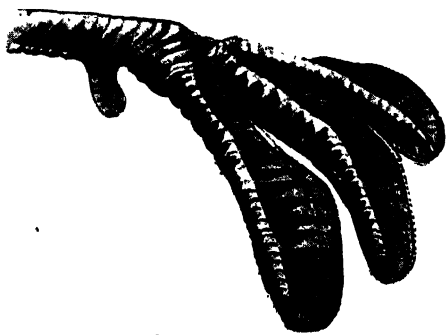
Markings.—The adult male, in summer, has the head and its two elongated tufts, and the upper parts of the body, *blackish-brown*. A silky *chestnut-coloured* fringe extends from behind the cheeks to the fore-neck, which, being edged with *black*, gives the appearance of a dark ruff. This ruff is often erected round the face in the nesting season. The cheeks and under surface of the body, *silvery-white*. The base of the bill tinged with *yellowish-red*, but *dusky-grey* towards the tip. The eyes *crimson*.

The female is slightly smaller than the male, and

her crest and fringe are less developed, otherwise her plumage is similar.

In winter, the ruff is absent, and only slight tufts are to be seen on the head. This GREBE at *all* seasons has a *white* streak extending from the base of the upper bill over each eye.

When seen flying, which is not often, a *white* bar is conspicuous across the wing.



FOOT OF GREBE

The peculiar form of a GREBE's foot, with its webbed, yet separated, toes, is shown above, and is sufficient to identify the birds of this group at a glance.

Nests.—Rather freely on the large fresh-waters of our eastern and midland counties, less numerously elsewhere in England; sparingly in Wales; very generally on the lakes of Ireland; and very locally in Southern Scotland.

Abroad, the GREAT CRESTED GREBE nests abundantly in many districts of Central and Southern Europe; in North Africa; in Central Asia, Northern India, China, and Japan; as well as in Australia and New Zealand.

The nest of the GREAT CRESTED GREBE is placed among reeds, and consists of a floating mass of aquatic vegetation, that rises and falls in accordance with the prevailing height of the water. The eggs, usually four in number, are *white*, and *chalky* in texture, but they soon become much stained by the moist materials of which the nest is formed.

Though the GREAT CRESTED GREBE is nowhere numerous in the British Islands, yet it is widely distributed on our inland waters, except in Scotland, where it is almost a rare bird. On the protected broads of Norfolk it is not uncommon both in winter and summer, a few pairs nesting every season on most of the meres of that county.

In Ireland, GREAT CRESTED GREBES may be seen throughout the year on nearly all the reed-fringed lakes, pairs of these birds occupying the same little bays and corners for nesting annually.

Though I have watched the GREAT CRESTED GREBE glide into the water off her nest, I have never found the eggs exposed, but always slightly covered, however suddenly I disturbed the bird.

When driven from her nest, the Great Crested Grebe will watch you from quite a short distance if reeds are present to which she can resort for partial concealment.

I have rarely met with Great Crested Grebes on the coast, as, should severe frost drive them from their usual haunts, they prefer to visit the rivers rather than salt-water.

THE LITTLE GREBE

Local names.—Dabchick, Dipper.

Length.—8½ to 9½ inches.

Weight.—8 oz. to 10 oz.

Markings.—In summer, the adults of both sexes have the front and top of the head, the hind-neck, and upper parts of the body, *blackish-brown*. The chin *black*. The cheeks, throat, and sides of the neck, *chestnut red*. The under-parts chiefly *grey*, but shaded with *brown* on the breast and flanks. The wings *dark grey*, with a concealed patch of *white*. In winter, the *chestnut* is replaced by *brown*, and the chin is then *white*. There is, however, by reason of its *small* size, combined with the shape of its feet, no difficulty in

recognising the Little Grebe at any season of the year.

Nests.—The Little Grebe nests very generally on the fresh-waters of our Islands, though not so freely in Scotland as south of the Tweed and in Ireland.

The Little Grebe (Summer plumage)

Abroad, the Little Grebe breeds in Southern Scandinavia, and in Central and Southern Europe. It is widely distributed over both Asia and Africa, and occurs in the north of Australia.

The Little Grebe forms a large nest that either rests on a tangle of floating weed, or is placed be-

tween a fork in the branch of a tree that hangs level with the water. The eggs are at first *white*, but soon become much stained by the moist vegetable matter composing the nest.

This is far the most numerous of its genus in the British Islands. We have scarcely a quiet pool, a lake, or a river, on which the LITTLE GREBE does not nest in summer, or may not be found in winter, and I have on several occasions seen small gatherings of from eight to ten of these birds swimming about our tidal estuaries.

The LITTLE GREBE is a sociable bird, and I have often watched it, when within a few yards of me, diving in clear water for minnows and sticklebacks. It has even found its way to the centre of London, and I recently saw one on its nest on the island of the ornamental water in St. James's Park.

HORNED OR SLAVONIAN GREBE

Length.—12½ to 13½ inches.

Weight.—12 oz. to 14 oz.

Markings.—In summer, the adult male and female have the top of the head, forehead, and a large ruff

of elongated feathers springing from the cheeks and chin, *black*. A tuft of light *chestnut* feathers on either side of the head, passing from the base of the upper bill over the eye to beyond the back of the head. The upper parts of the body *dark brown*. The front of the neck, breast, and flanks, *chestnut*; the rest of the under-parts and a bar on the wings, *white*. The bill *black*, tinged with *red* at the base, and *whitish* at the tip. In winter, no ruff or ear tufts are apparent, and the general plumage is *dark brown* above, and *white* below, but shaded with *grey* on the front of the neck and on the flanks.

Nests. — In Iceland, Norway, Sweden, Central Russia, Siberia, and Northern America.

The nest and eggs of the Slavonian Grebe are similar to those of the Great Crested Grebe, except, of course, in size.

The Slavonian Grebe is not uncommon in winter on the eastern sea-board of England, and on both sides of Scotland, especially towards the north; but elsewhere in our Islands, Ireland included, it is scarce. On the north-east coast of England I have frequently observed, in a day's cruise, a half-dozen or more of these birds in one estuary; and though I have killed a good many as late as the end of February, I have

never obtained one in the British Islands with any sign of the 'horns' so conspicuous in the nesting season.*

THE BLACK-NECKED OR EARED GREBE

Length.—11½ to 12 inches.

Weight.—12 oz. to 14 oz.

Markings.—In summer, the adult male and female may be known by the following characters. The head and neck *black*. A streak or tuft of longish *golden-chestnut* feathers on each side of the head, which starts from behind the eye, and extends backwards and downwards over the neck. The BLACK-NECKED GREBE closely resembles the rather larger SLAVONIAN GREBE when both are in winter dress, but the former may at all times be identified by its bill, which is *slightly upcurved*: the bill of the SLAVONIAN and of the other GREBES, like those of the SEA-DIVERS, being straight and dagger-like in form. Another distinction between these two GREBES in winter is to be found in the *white* markings on their wings. In both species the smaller flight-feathers are mainly *white*. In the EARED GREBE, however, the *white* extends to

* 'Horned Grebe' is much the best name for this bird. 'Slavonian Grebe' is a misnomer, for the species is certainly *not* a native of Slavonia!

the four innermost long flight-feathers; while in the Slavonian Grebe all the long flight-feathers are *dark coloured*.

Nests.—Throughout Central and Southern Europe, Northern Africa (numerously round the Mediterranean and Black Seas and in Algeria), and in temperate Asia. Is *supposed* to occasionally nest in Norfolk. The nest and eggs resemble those of the other Grebes.

The Black-necked Grebe, though rarely observed in Scotland and Ireland, is not so scarce in the south of England, or on our eastern coasts, particularly those of Norfolk and Suffolk; to our western shores it is a chance straggler.

The Black-necked, unlike the other Grebes, is seldom killed in the British Islands in the autumn and winter, though a few specimens are obtained annually during the cold season in the Firth of Forth. It is a bird that usually wanders to us in spring, when seeking its accustomed breeding quarters in other countries.

I have, however, no doubt that, from the similarity of the Black-necked to the Slavonian Grebe when both are in winter dress, the two kinds are sometimes mistaken for one another, yet the few Black-necked Grebes I have seen in our Islands, were killed on the

east coast of England in April or May, and were in partial or complete breeding plumage, with the handsome *golden-chestnut* ear-patches more or less developed.

The BLACK-NECKED is the rarest of the five GREBES that frequent the British Islands.

THE RED-NECKED GREBE

Length.—16½ to 17 inches.

Weight.—20 oz. to 22 oz.

Markings.—The adult male and female, in summer, have the top and back of the head, and the hind-neck, *black*. The sides of the head below the eyes, the chin, and the throat, pale *ashy-grey*, edged with *white*, forming a very noticeable light patch. No ruff round the neck, but the feathers of the crown elongated into a slight crest. The front of the neck a bright *chestnut-red*. The under surface of the body *satin-white*. The upper parts of the body, and the wings, *blackish*; some of the smaller or inner flight-feathers *white*, forming a bar on the wings. The bill *black*, except its base, which is *yellow*. In winter, the *red* on the neck, from which this bird derives its name, is re-

placed by dull *white*; and the crown, nape, and upper-parts are *greyish-black*.

The Red-necked Grebe in winter is very similar in appearance to the Great Crested Grebe at the same season, but may be readily known from the latter by its *smaller* size, and by its *not* having a *white* streak passing from above the base of the bill over each eye. It may be distinguished from the *other* three Grebes by its *larger* size.

Nests.—In Central and Southern Scandinavia; in Denmark and Northern Germany; throughout a great part of Russia (below the Arctic Circle); and in South-Western Siberia. The Red-necked Grebe resembles in its nesting habits and eggs the other Grebes.

The Red-necked Grebe is not uncommon in winter on our eastern sea-board, and on the lakes that are adjacent thereto; but on the west coast of England and Scotland it is seldom seen, and to Ireland it is a very rare straggler.

Note.—Though the males and females of the Grebes are similar in plumage, the latter are slightly the smaller in size, and their markings in summer are less distinct than are those of the males.

LETTER XVIII

CORMORANTS AND GANNET

THE COMMON CORMORANT

Local names.—GREAT or BLACK CORMORANT, SCART.

Length.—35 to 36 inches.

Weight.—7½ lbs. to 8½ lbs.

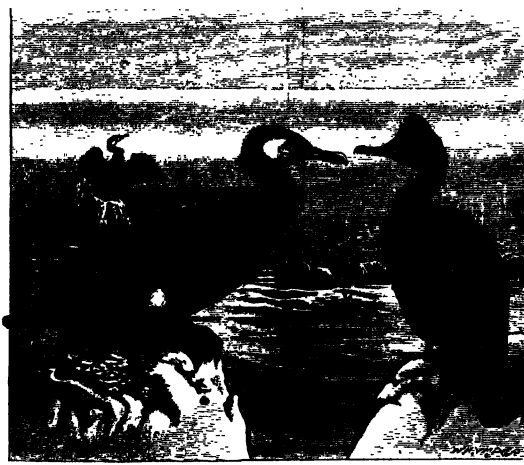
Markings.—During the autumn and winter, the adult male and female of the COMMON CORMORANT have the head, neck, and breast, *purplish-black*; the back and wings *bronzy-green*, each feather edged with *black*. A *greyish-white* patch on the throat extends round and under the base of the bill to behind either eye.

In spring, a *white* oval spot develops on each thigh, many fine streaks of *white* appear on the head and neck, a crest adorns the back of the head, and the patch on the throat becomes *pure white*.

The COMMON CORMORANT is much larger than the GREEN CORMORANT, next alluded to, and may be known not only by its superior size, *blackish* colour, and *white*

or else *greyish* throat, but also by the *fourteen* feathers which form its tail.

Nests.—Freely on our sea-coasts, where cliffs, isles, and rocks are available for this purpose. On the level



COMMON CORMORANT GREEN CORMORANT
(Spring plumage)

shores of the eastern English counties, south of Flamborough Head, the CORMORANT finds no suitable breeding-haunts, and consequently does not nest.

I have known the COMMON CORMORANT to breed in several localities inland in the British Islands, usually on flat sheltered ledges of rock on hill-sides, and I have

seen it in the south of Ireland nesting amid the tops of high fir trees.

Abroad, this CORMORANT nests as far north as Iceland, Greenland, and the Arctic coast of Norway. Inland, it has a wide breeding range over Europe and Asia; nesting in trees, in swamps, and on cliffs. It forms a large nest of sea-weeds, or sticks and grass, in which are laid five *white* eggs of chalky appearance.

Although this bird may be seen throughout the year in the vicinity of its nesting stations, it has a wider distribution in the autumn and winter, and at the former season often wanders to fresh-waters inland.

THE GREEN CORMORANT OR SHAG

Local name.—CRESTED CORMORANT.

Length.—26 to 27 inches.

Weight.—4 lbs. to 4½ lbs.

Markings.—The adults of both sexes have their plumage, at *all* seasons of the year, *dark metallic-green*,

without any white marks. The head in spring develops a crest of recurving feathers.

This Cormorant is much less in size than the preceding, and has only *twelve* feathers in its tail.

Nests.—Freely in our Islands, chiefly where caves and hollows exist in the cliffs of the sea-coast; but never, like the Common Cormorant, inland. The nest and eggs, though smaller, are similar to those of the Common Cormorant. Abroad, the Green Cormorant breeds in Iceland and along the entire coast of Norway; also on the sea-board of France, Spain, and the Mediterranean.

This bird rarely leaves the tide, though I have, on a few occasions, seen it on fresh-waters. Cormorants are ungainly, evil-smelling, worthless fowl. They are common to nearly all parts of our coasts in winter, but are more local in summer. They may often be seen sitting, facing the wind, on a rock with their wings outstretched, drying their feathers, after these have been thoroughly soaked under water; though why Nature has necessitated this airing of garments, by denying the Cormorant the water-resisting plumage of other diving-birds, is a puzzle.

THE GANNET

Local name.—SOLAN GOOSE (a ridiculous name, as the GANNET has no affinity to a Goose).

GANNET

Length.—32 to 34 inches.

Weight.—7½ lbs. to 8 lbs. (a very fine one, 8½ lbs.)

Markings.—The adults of both sexes, in summer and winter, have the head and neck *creamy buff*; the

rest of the plumage *white*, except the long feathers of the wings, which are *black*.

The young of the year have the head, neck, and back, *dark grey*, streaked and flecked with *white*; the abdomen *white*, mottled with *dark grey*.

In the second year the back becomes uniform *dark grey*; the head, neck, and under-parts, *white*, mottled with *grey*. The dark colour of the back is gradually replaced with *white*, year by year till the sixth, when the bird at length attains its adult plumage.

Nests.—The Gannet breeds in immense colonies on a few islands off the coast of Scotland. In the east only on the Bass Rock near North Berwick.* In the west in four localities; (1) Ailsa Craig, at the entrance to the Firth of Clyde; (2) on the cliffs of, and on two detached rocks near, the small island of Borreray, close to St. Kilda, some fifty to sixty miles west of the Hebrides; (3) on the island of Sulisker, thirty-five miles north of the northernmost point of the Hebrides; (4) on the lonely rock of Sulesskerry, about forty miles west of Stromness in the Orkneys.†

* A wiseacre some years since calculated that the Gannets of the Bass Rock alone, when they resort there to nest, consume a thousand pounds' worth of sea-fish every day.

† I am credibly informed that at least 100,000 pairs of Gannets were nesting on 'Sulisker' last summer, or quite ten times as many pairs as now breed on the Bass Rock. *Query*: What is the value of the fish this immense colony of great birds consume daily?

In England the one breeding haunt of the GANNET is on Lundy Island, in the Bristol Channel; and in Wales it nests only on the island of Grassholm, off the coast of Pembrokeshire; in both places in but small congregations.

In Ireland the GANNET nests in very limited numbers on the Bull Rock off Dursey Head, county Cork, near the northern entrance to Bantry Bay; and on the Little Skellig Rock, near Ballinskelligs Bay, on the western extremity of county Kerry. Elsewhere in Ireland the GANNET does not now nest.

Abroad, the GANNET breeds on the Faröes; in Iceland; and in the Gulf of St. Lawrence, on the North American coast. In winter this bird wanders south as far as the African and West Indian coasts. The nest is large, and composed of grass and seaweeds. The single egg is *white*, and its surface is *chalky* in texture.

GANNETS may be seen, out at sea, round our coasts in winter and summer, though of course they are far more abundant in the latter season in the vicinity of their nesting quarters than they ever are on these or other parts of our shores during the remainder of the year.

COMMON BITTERN LITTLE BITTERN COMMON HERON

LETTER XIX

HERONS AND BITTERNS

THE COMMON HERON

Local name.—CRANE.

Length.—35 to 36 inches.

Weight.—3¾ lbs. to 4 lbs.

This bird is too well known to need description; it is very generally distributed throughout our Islands, wherein it nests freely in many localities that are near the lakes, rivers, marshes, and estuaries, in which it finds its food.*

When a HERON is flying the motion of its wings is slower than that of any other bird I know, a SEAGULL not excepted. I have often timed the beat of a HERON'S wings, including up and down strokes, at only 120 to the minute. I once found a HERON that had been killed by a large eel. The HERON had partly swallowed the eel, but the latter had knotted its tail so tightly round the neck of the bird as to strangle it.

THE NIGHT HERON

Length.—22 to 24 inches.

Markings.—The adult male and female have the forehead, and a stripe over each eye, *white*; the top and back of the head, the nape of the neck, and the back, *black* glossed with *green*. The wings and tail

* I have only once seen a Common Heron with *four* long plumes on the head, the usual number being two or three.

The eggs of the Common Heron are greenish-blue in colour, three or four in number, and about the size of those of a Wild-Duck.

ash grey. The under-parts from chin to tail *greyish-white*. The legs and toes *yellow*. Bill nearly *black*. Eyes bright *red*.

NIGHT HERON

The most noticeable feature of this bird is its *crest*, which is composed of three or more long narrow *white* feathers, which hang down the back of the neck. In old males these plumes are sometimes

six to seven inches in length, and as many as ten in number.

When the NIGHT HERON is excited it raises its crest, and the feathers on the crown of its head, like a Cockatoo, as shown in the illustration.

Nests.—Sparingly in the south of France; more numerously in Spain, Italy, Sardinia, the valley of the Danube, and Southern Russia. The NIGHT HERON nests in many parts of Central and Southern Asia, including Ceylon, Burmah, India, China, and Japan; and is also distributed throughout Africa and America.*

The NIGHT HERON breeds in colonies in wooded swamps, placing its nest, composed of sticks, in trees and bushes. The eggs are about five in number, and *greenish-white* in colour.

The NIGHT HERON is a *rare* bird in the British Islands, though one or two are usually killed every spring and autumn during its migrations, chiefly in our eastern and southern counties. To Scotland and Ireland the NIGHT HERON is even less frequent in its visits than to England.

* The Night Heron is a widely distributed bird, and, except in the north, is to be found nearly all over the world. A few years since the Night Heron nested in Holland and Germany, but I cannot ascertain that it does so now.

THE COMMON BITTERN

(Called common when its abundance as a resident in the fens and marshes of our Islands warranted the name.)

Length.—28 to 30 inches.

Weight.—2½ lbs. to 2¾ lbs.

Markings.—The adults of both sexes have the upper part of the head *black*; the back, and upper parts of the wings, mottled with *black*, *buff*, and *rufous*; the *black* predominating on the back, the *buff* on the wings. The flight-feathers and tail *blackish-brown* slightly mottled or barred with *rufous*. The under-parts, and a conspicuous ruff (formed by the elongation of the neck-feathers) which fringes the sides of the neck and overhangs the breast, *buff*, streaked in the centre and barred on the sides with *dark brown*. The legs and toes vivid *green*. The toes *much* longer than those of the HERON. The eyes *yellow*.

Nests.—The last eggs of the BITTERN found in the British Islands were taken in Norfolk in 1868.

Abroad, the BITTERN breeds in many parts of

temperate and Southern Europe; in Southern Siberia, China, and Japan; and very generally throughout Africa.

The BITTERN builds its nest on wet ground among dense reed beds, and not in trees like the HERON. The eggs are uniform *olive brown*, tinged with *green*, and are usually four in number.

The BITTERN occurs in our Islands every winter and spring in varying numbers, being in some seasons rare, in others not so very uncommon, especially in districts of marsh and fen, such as still exist in Norfolk and Suffolk, and particularly in Ireland.

In the latter country I have on four occasions killed BITTERNS, when I was SNIPE shooting, and I once, in the west of Ireland, saw three of these birds hanging up together for sale in a game-dealer's shop, that had been obtained in one week by the local fowlers.

The first BITTERN I killed, I noticed peering at me, within twenty yards, out of the grass and rushes. The bird stared and I stared, and for the life of me I could not make out what it was, its head, the only part visible, was so immovable, and its aspect so quaint.

I once, to my regret, winged a BITTERN, and I shall never forget its splendid appearance as I endeavoured to capture it alive, which, from its furious attempts to stab, I was unable to do. This bird fluffed its plumage out till it looked half as large again as it really was;

the ruff round its neck and head seemed to stand off from its body as if every feather was on end, the eyes sparkled with rage, and the dagger-like bill was drawn back and poised to strike, as indeed it did in all directions.

When moving about, the BITTERN does not walk erect but crouches low, with the head and neck drawn in and the back raised, as shown in the illustration (p. 221).

THE LITTLE BITTERN

Length.— 12 to 13 inches.

Weight.—7 oz. to 8 oz.

Markings.—The adult male has the top and back of the head, and the back, *black* tinged with *green*. The main flight-feathers, and the tail-feathers, *dark brown*. The sides of the head, the under-surface generally, and the upper feathers of the wings, uniform *rich buff*, with a few *dark brown* streaks on the breast and sides. The bill and legs *greenish-yellow*.

The female has the crown *brownish-black*, the hind-neck and sides of the head, *rufous*. The back *brown*; the under-surface *buff*, much streaked with *brown*.

Nests.—The LITTLE BITTERN formerly bred in the fens and marshes of England, and at the present day is *supposed* to nest occasionally in Norfolk. Abroad, it breeds in Central and Southern Europe, South-Western Asia, and in North Africa.

The nest is placed among reeds growing in water, sometimes in a willow bush, and is composed of aquatic herbage. The eggs are plain *dull white* and usually five in number.

The LITTLE BITTERN can be easily recognised by its *small size*, and its *similarity in form* to a BITTERN or HERON (see illustration, p. 221). The LITTLE BITTERN has the bill, long legs, and soft drooping feathers down the neck and breast, characteristic of the HERONS and BITTERNS; it is, however, no larger than a GREEN PLOVER.

The LITTLE BITTERN chiefly appears in our Islands in the spring and summer; and though a *rare* visitor, one or two are usually recorded in the east or south of England every year, but in Scotland, Ireland, and Wales, it has been very seldom observed.

The following HERONS, and the AMERICAN BITTERN, have been obtained on so few occasions in the British Islands that I will only briefly allude to them.

Do not, however, *eat* or *throw away* a bird that you cannot identify; find out its name first for the benefit

of others perhaps interested more than yourself in a 'stranger.'

I once picked the feathers of a Garganey out of a waste heap; the bird, a very rare one in the locality in question, having been served at dinner under the impression it was a Common Teal.

Great White Heron. *Length.*—40 to 42 inches. The entire plumage *white*, with, in summer, many long plumes on the back and breast. Bill, *black* in summer and *yellow* in winter. Legs and feet *black*. Eyes *yellow*.

A casual visitor from Continental Europe, which has been obtained eight to ten times in the British Islands, but not in Ireland.

Buff-backed Heron. *Length.*—18 to 20 inches.

In summer, this bird has the elongated feathers on the head and neck, and the long drooping feathers of the back, *reddish-buff*, hence its name. The remainder of the plumage *white*. The bill, legs, feet, and eyes, *yellow*, more or less tinged with *red*.

The European home of this Heron, in summer, is Southern Spain; it has only once been recorded in the British Islands (Devonshire, 1805).

Purple Heron. *Length.*—32 to 36 inches.

The Purple Heron much resembles the Common Heron in form, but may at once be known by its smaller size, more slender build, and the greater richness of its colouration.

The adults of both sexes have the upper part of the head, and its long pendant crest-feathers, *black* glossed with *purple*. The upper surface of the body, the wings, and the tail, *slate grey*. The long narrow plumes of the back *pale chestnut*. The neck *chestnut*, traversed by a narrow *black* band down each side. The feathers of the lower neck much elongated, and streaked with *black*, *grey*, and *chestnut*. The breast deep *maroon red*. The bill and eyes *yellow*. The legs and toes *greenish-yellow*. The young birds are *rusty red* above, *brownish-white* below.

Has occurred about fifty times in England, chiefly on the east coast; very seldom in Wales; once only in Ireland; and twice in Scotland.

The Purple Heron nests freely but locally in Central and Southern Europe, building in dense reed-beds and in trees in swamps.

Squacco Heron. *Length.*—18 to 19 inches.

In summer, the top of the head and the hind-neck are light *buff*, with dark streaks. A long drooping crest of eight to ten narrow *white* feathers edged with *black*. The sides and front of the neck, and its pendant feathers, *rich buff*. The back *brownish-buff* with a vinous tinge, its plumes long and hair-like.

The wings, lower back, under-parts, and tail, *white*. Legs and toes *yellow* tinged with *pink*. Bill *black* at the tip, *light blue* at the base. Eyes *yellow*.

The SQUACCO HERON is a summer visitor to Central and Southern Europe, and has been recorded between forty and fifty times in the British Islands (only twice in Scotland).

LITTLE EGRET. *Length.*—22 to 23 inches.

Pure white. The bill and legs *black*, the toes tinged with *yellow*. The eyes *pale yellow*.

In summer there are many hair-like drooping plumes on the back and breast; and two long and narrow pendant *white* feathers extending from, and beyond, the top of the head.

A summer visitor to South-Eastern Europe that has only *once* occurred in the British Islands (Devonshire, 1870).

AMERICAN BITTERN. *Length.*—26 to 27 inches.

Very like the COMMON BITTERN but a little smaller. The long feathers of the wings all *one shade* of brown, and *not barred* with *black* and *chestnut* like those of the COMMON BITTERN; nor is the plumage so bright as in the latter bird. The upper-parts are finely vermiculated, and *not* mottled as in the COMMON BITTERN.

A common North American bird that has been obtained about twenty times in the British Islands.

I need hardly add that none of these four last-mentioned HERONS, the AMERICAN BITTERN, or the EGRET, have ever been recorded as nesting in our Islands.

You can always tell if a passing bird is a HERON or a BITTERN, for it is the habit of these species when on wing to carry their heads tucked back between their shoulders, and their long legs extended straight out behind them; other birds, including STORKS, CRANES, SPOONBILLS, and IBISES, fly with their heads and necks, as well as their legs, outstretched. (The WOODCOCK is a notable exception, as this bird inclines its head and bill downwards when flying.)

NOTE.—The males and females of the HERONS and BITTERNS (with the exception of the LITTLE BITTERN) are very similar in plumage, though the females are usually the smaller, and have their plumes and crests less developed than those of the males.

LITTLE EGRETS, and also the HERONS which have elongated nuptial plumes, lose these ornaments after the nesting season, and acquire them again in the spring; otherwise (like the COMMON HERON) their winter and summer dress shows little difference.

LETTER XX

STORKS, SPOONBILL, IBIS, AND CRANES

WHITE STORK*

Length.—42 to 44 inches.

Markings.—The adults are *black* and *white*. The wings (excepting the shoulders), and a small bare space round the eye, *black*; the remainder of the plumage *pure white*. The bill, legs, and feet, a rich *red*. The front toes connected at their bases with small webs. The eyes *brown*.

Though the WHITE STORK nests freely as near to us as Holland; also in Southern Sweden, Denmark, Germany, Spain, and throughout a great part of Central and Eastern Europe; yet it is a *very rare* visitor to our Islands. The STORK, as might be expected, has occurred more often in the eastern counties of England than elsewhere in the British

* The plumage of the Storks does not vary in regard to sex or season.

Isles, having been recorded about thirty times therefrom, chiefly in Norfolk, Suffolk, and Essex; in Scotland it has been seldom obtained, and only twice in Ireland.

The White Stork never nested in England, but was formerly a more frequent visitor to us than it is at the present time.

BLACK STORK

Length.—38 to 40 inches.

Markings.—The adults have the head, the neck and its pendant feathers, the wings, back, and tail, *black*, glossed with *violet*, *purple*, *copper* and *green*. The breast, abdomen, and under the tail, *white*. The bill, the bare skin round the eye, and the legs and toes, *bright red*. The eyes *brownish-red*.

A much rarer straggler than the White Stork, for this bird has only been obtained about a dozen times in England, and not in Ireland, Scotland, or Wales. On the Continent it is found in Southern Sweden, Denmark, and in Central, Southern, and Eastern Europe.

WHITE SPOONBILL

Length.—32 to 34 inches.

Weight.—8½ lbs. to 8¾ lbs.

Markings.—The adults, in summer and winter, are *pure white*, except that the feathers of the lower part of the neck, and of the thick drooping crest on the back of the head, are slightly tinged with *yellow*,* and the skin on the chin with *orange*.

The bill *yellow* near the tip, the remainder *black* barred with *yellow*. The eyes *red*; the legs and toes *black*, the latter connected by very small webs.

If you *should* obtain or even *see* this bird, its *white* plumage and long, heavy, flat, spoon-shaped, bill, will easily enable you to identify it. (See next page.)

Nests.—The WHITE SPOONBILL breeds in many parts of Europe, Asia, and Africa; and formerly nested in South-Eastern England.

The nest is a large structure composed of reeds, and is placed among rushes, or in trees. The eggs are four in number, and are *white* streaked and spotted with *brown*.

The WHITE SPOONBILL occasionally wanders to us,

* In winter the crest is absent.

perhaps from Holland, where it still breeds sparingly. One or two of these birds are usually obtained

WHITE SPOONBILL

every year in our Islands, chiefly in the eastern and southern counties of England.

GLOSSY IBIS

Length.—21 to 22 inches.

Markings.—The adults of both sexes have the head, neck, and all the under-parts, *dark maroon*. The back, wings, and tail, nearly *black*, and glossed with *green* and *purple*.* The eyes *brown*. The bill curved downwards like that of a Curlew (see illustration opposite) : a bird it also, superficially, so closely resembles in shape that it was formerly, when more often seen on our shores than it is now, known as the Black Curlew. The young bird is dark *dull brown* without the glossy tints of the adult, and has the head and neck streaked and mottled with *white*.

The Glossy Ibis is an Eastern and Southern European species, and is a *very rare* straggler to our Islands, though its occurrence is usually recorded therein once in every two or three years, chiefly in the autumn.

* The winter plumage of the Glossy Ibis is duller than that of summer, and the purple and green gloss on the head, back, and wings, is not so noticeable in the former season as it is in the latter one.

THE COMMON CRANE

Length.—46 to 48 inches.

Markings.—The general plumage of the adults of both sexes, in summer and winter, is *slate grey*. The innermost flight-feathers are elongated, and in the form of drooping *black* plumes, tinted with *blue*, curve down over the wings and tail. On the centre of the top of the head is a *rough red patch*. The young birds have not the *red* patch on the head, and the plumage on their backs is *grey* and *brown* intermixed.

This large and unmistakably attired bird is a *very rare* straggler to the British Islands, wherein it is occasionally obtained on migration, chiefly in the islands of the north of Scotland.

The CRANE long ago nested in our eastern counties. As an European breeding bird it is widely distributed over the morasses of the continent and Siberia.

DEMOISELLE CRANE

Has been *once* obtained in the British Islands (Orkney, 1863).

This bird is about 32 inches in length, or much

smaller than the preceding, and though the general plumage is *grey* like the COMMON CRANE, it has the sides of the head, the chin, throat, front and sides of the neck, and the long feathers that overhang the breast, *black*; while from behind either eye springs a tuft of *white* feathers which extend backwards over the hind-neck. The innermost feathers of the wings are elongated, and project in fine points beyond the tail; but are *not* in the form of drooping plumes like those of the COMMON CRANE.

The DEMOISELLE CRANE is a Southern and South-Eastern European species, and is also widely distributed over Asia and Africa.

LETTER XXI

COOT, WATERHEN, CRAKES, AND RAILS

THE COOT

Local name.—Bald Coot.

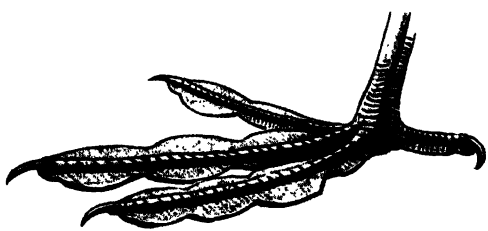
Length.—16 to 17 inches.

Weight.—2 lbs. 2 oz. to 2 lbs. 6 oz.

Markings.—The general plumage of the adults is *dark slate grey* above, and *dusky-black* below. A narrow *white* bar across each wing. The bare patch of skin on the forehead, which has given this bird the name of Bald Coot, *white*. The bill *flesh-colour* at the base, and *white* at the tip. The eyes *crimson*. The foot of the Coot (as shown opposite), with its long lobe-fringed toes, enables this bird to travel over marshy ground, and to swim with equal facility. In

some respects the foot of a COOT resembles the foot of a GREBE, save that the webbing on the front toes of the COOT is *indented*.

Nests.—Freely in the British Islands. Abroad, the COOT breeds in most parts of Europe except in the north, though it nests in Southern Scandinavia. The COOT also nests in the temperate regions of Asia, and



FOOT OF THE COOT

is common as a resident and winter visitor in Northern Africa. The nest is composed of coarse dry stems, and is placed among reeds and other aquatic herbage growing in water. The eggs are *light grey* finely speckled with *dark brown*, and about nine in number.

In winter the COOT is more widely distributed than

in summer, and is then common to many of our tidal as well as inland waters.*

I have had fine sport with the Coots, by driving them slowly from the centre of a lake to one of its ends, by means of a line of boats (each boat containing a shooter). When at length the Coots have swum forward till they find themselves cornered, they rise and fly, a few at a time, at a great pace, high overhead, back to the open water. These tactics can sometimes be repeated for the best part of a day, until the Coots either leave for other resorts, or learn the wisdom of avoiding the boats.†

If a Coot is *skinned* and *roasted* it is excellent eating, but if cooked with the skin on its flavour is too strong to be pleasant; another thing, if your cook *plucks* a Coot, its innumerable small black feathers will pervade the earth and air of half the parish.

THE WATERHEN

Local name.—Moorhen (*moor* formerly implied *meer*, and Mere-Hen would be a far more appropriate name for this bird).

* Though the Coot, like the Waterhen, frequents the reeds and rushes that grow round the margin of shallow lakes, it is, however, much less shy than the latter bird, and may often be seen in large gatherings on the open water of inland meres, as well as on the tidal estuaries, where the Waterhen is never found.

† In this manner 1700 Coots were, a few years since, killed in *one* day, to my knowledge, on a large lake in the south of England.

Length.—13 inches.

Weight.—14 oz. to 15 oz.

Markings.—Too well known to need description.

The feet of the WATERHEN are remarkable for a bird that passes so much of its time swimming, for the toes have *no* lobe-like expansions like the COOT, but are long, slender, and similar to those of a RAIL;

and though admirably adapted for passage over wet soil, they are less well devised for propelling the bird in water.

Nests.—Freely in all parts of the British Islands. The WATERHEN is invariably the first bird to appear on any small piece of water, whether naturally or artificially formed. On the continent the WATERHEN nests in Southern Scandinavia and throughout Central and Southern Europe. It also inhabits Western Asia and Northern Africa. The nest is placed among aquatic herbage (occasionally in low trees), and is composed of dry blades of the reed. The eggs are about nine in number and *dull buff*, marked with *reddish* and *greyish* spots and streaks.

I only lately observed that it is the habit of the WATERHEN to carry, one at a time, her newly hatched young on her back, when voyaging across deep water to some reed-grown shallow, in which to teach her chicks to paddle and feed.*

* A Waterhen made her nest last summer, at Thirkleby, among the stones close under the upright pipe of a fountain, the water from which played ten feet high, and fell in a circular shower just clear of the nest. After the bird had sat for a few days, a leak appeared in the side of the fountain pipe, and a small jet of water shot continuously and forcibly against the back of her head and neck, and ran off the end of her bill in a little stream. Yet the bird sat bravely for her full time before she deserted her eggs, which were spoilt by the water that invaded the nest.

THE LAND-RAIL OR CORNCRAKE *

Length.—10 to 10½ inches.

Weight.—7 oz. to 8 oz.

Common during the spring and summer, and till near the end of September, to all parts of the British Islands, in which it nests freely.

The LAND-RAIL is so well known that a description of its plumage is unnecessary; it is, however, a bird that is more often *heard* than *seen*, as it haunts the shelter of the long grass of pastures, clover, and hay-fields, both in dry and in wet localities.

I used to imagine (a common supposition generally) that the LAND-RAIL was a ventriloquist, and could sound its rasping note so as to make it appear that the bird was near or far, as its fancy or caution dictated. I have proved, however (after a deal of trouble in following, calling, and shooting them), that when a LAND-RAIL'S voice is heard, now close and then distant, it is the result of two males challenging each other, the nearest to you ceasing its cry as you approach it,

* The summer and winter plumage of the Crakes and Rails is very similar, but the females are slightly smaller than the males. The female of the Waterhen is, however, in my experience somewhat larger and brighter in colour than the male.

and the farthest from you continuing to call till its suspicions are in turn aroused, the first bird starting again as you leave its vicinity.

Land-rails are occasionally met with in the British islands in winter, but these are probably weak or injured birds. Land-rails leave us towards the end of September, and in the first half of October, for their winter quarters abroad, though how the Land-rail with its slow, laboured flight, short wings, and drooping legs, can cross wide seas is a mystery.

The *nest* is placed among long grass. The eggs are of a rich *buff* ground colour, spotted with *brownish-red* and *grey*. The chicks are entirely clothed with *black* down.

THE WATER-RAIL

Length.—10½ to 11 inches.

Weight.—5 oz. to 5½ oz. (a very fine one, 6 oz.)

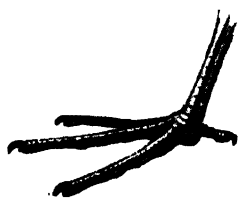
Markings.—The adults have the entire upper plumage *olive brown*, streaked with *black*; the sides of the head, front of the neck, and the breast, *slate grey*. The flanks crossed with *black* and *white* bars. The flight-feathers *blackish-brown*. Between the legs and under the tail, *buff*.

The bill (1¼ inch long) *red* shaded with *brown*. The eyes *brownish-red*. The legs and toes *brown*.

Nests.—The WATER-RAIL nests sparingly in most parts of the British Isles where marsh and fen exist,

and for this reason more numerously in the eastern counties of England, and in Ireland, than elsewhere in our Islands. The nest is usually among sedge, and well concealed. It is composed of blades of reed and grass. The eggs are about ten in number, and of a pale *buff* ground colour, spotted with *brownish-red* and *bluish-grey*.

The WATER-RAIL is much less abundant than the LAND-RAIL in the British Islands. It is not, however, an uncommon bird, but from its disinclination to rise on wing, and its habit of frequenting wet sedge-grown localities and the tangled aquatic herbage that borders small streams and dykes, it is difficult to find, and is judged, as a result, to be less numerous than it really is. I have on many occasions shot WATER-RAILS when SNIPE-shooting, and I have known a spaniel catch



FOOT OF THE WATER RAIL (half natural size)

one alive. This bird I placed in a pool of water, to see if it could swim, which it did with fair ease, as all the members of its tribe can; though their long toes (as shown above) are better adapted for passing over soft mud and the leaves of water plants than they are for swimming.

The WATER-RAIL is nearly a third smaller than the LAND-RAIL, and may at once be told from the latter bird by its dark colour; *much longer bill*; very long toes; *slate grey* under-parts; and especially by the *black* and

white bars on its *flanks*:—the flanks of the LAND-RAIL being barred with *white* and *chestnut*.

In winter, when the LAND-RAIL is absent from the British Islands, the WATER-RAIL is most commonly seen; the sedge and rank grass it hides in during the summer, affording less shelter during the cold season. The WATER-RAIL is, besides, always most abundant with us then, for numbers of these birds arrive from Northern Europe to pass the winter in our Islands.

The compressed wedge-like form of a Rail's body enables it to pass freely between the close-growing stems of reeds and rushes.

THE SPOTTED CRAKE

Length.—8½ to 9 inches.

Weight.—8¾ oz. to 4¼ oz.

Markings.—The adults have their upper-surface dark *olive brown*, with dark streaks and small *white* spots; the top of the head is, however, plain *dark brown*. The throat, and the abdomen, *dull white*. The neck and breast *brown*, much spotted with *white*; the sides barred with *white* and *brown*.

The bill (⅝ inch long) is *yellow* with a *red* base.

The eyes *light brown*. The legs and toes *green*, tinged with *yellow*.

Nests.—Sparingly and locally in the British Islands, chiefly in the fen districts of the eastern counties.

Abroad, the SPOTTED CRAKE breeds freely in many parts of Central and Southern Europe; and in Western Central Asia.

The nest is usually placed on a tussock of sedge growing in water, is formed of stems of dead leaves, and is lined with dry grass. The eggs are a dull *buff* ground colour, marked with *reddish-brown* and *grey*; in fact, they are like those of the WATERHEN, but are much smaller, being little larger than the eggs of a THRUSH.

The SPOTTED CRAKE is far less often obtained in the British Islands than the WATER-RAIL. It is a bird that is not very uncommon in the east of England during the summer, but it is less often seen in our western counties; is scarce in Scotland; and is rare in Ireland.

The SPOTTED CRAKE closely resembles the WATER-RAIL in its habits, and frequents marshy, sedge-grown ground, where it finds the concealment its *very* shy nature desires, and where it is probably more numerous than is supposed.

The SPOTTED CRAKE seldom winters with us, but arrives in the spring and departs in the late autumn.

The SPOTTED CRAKE, like the WATER-RAIL, is very

1. SPOTTED CRAKE 2. BAILLON'S CRAKE 3. LITTLE CRAKE

loth to rise and fly, and I once chased one for a half-hour, during most of which time it was within a few yards of me, before I killed it with a stick, so quickly did it thread its way among the tall grass and sedge, more after the fashion of a rat than a bird.

LITTLE CRAKE

Length.—7 to 7½ inches.

Weight.—1¾ oz.

Markings.—Somewhat resembles the Spotted Crake, but is much smaller. The adult male has the upper-surface *ochreous-brown*; the back streaked with *black*, with a *few* small *white* spots on its *centre* only, while down each side of the back is a stripe of *dull buff*, formed by the colour on the margins of the innermost wingfeathers. The forehead, sides of the face, eye-brow, and under-parts, *pale slate grey*. The sides with a few *white* bars. Under the tail *buffish-white*, with *blackish* bars.

(The female differs in having the cheeks and throat *white*, the remainder of the under-surface *pinkish-buff*. The sides and thighs *ashy*, the latter with *dusky* and *white* bars. The upper-parts as in the male, but brighter in tint.)

The bill *red* at the base, the remainder *green*. The legs and toes *pale green*. The eyes *red*.

Nests.—The Little Crake has not been known to nest in the British Islands. Abroad, it breeds in many parts of Central and Southern Europe; and in the western part of Central Asia.

The nest is a depression in a tussock of sedge, and is lined with short pieces of dry reed blades. The eggs are *pale olive*, streaked with *darker olive*, and about seven in number.

The Little Crake occasionally visits the British Islands in spring and autumn; it is, however, a *very rare* visitor that has been obtained some thirty times in England; once in Scotland; and twice in Ireland.

BAILLON'S CRAKE

Length.—6½ to 7 inches. (The smallest of the Crakes.)

Weight.—1½ oz.

Markings.—The adults resemble the male of the Little Crake, but are rather smaller, and also to be distinguished by having their flanks, abdomen, and thighs, *black* barred with *white*. The spots and streaks of *white* on the back more numerous than in the Little Crake, and not confined to that part, but extending to the smaller wing-feathers. The outer web of the first long feather of each wing *white*. (In the Little Crake the outer webs of these feathers are *brown*. The female resembles the male, but has the under-parts paler in tint, and the chin *whitish*.)

The bill dull *green*. The legs and toes *olive brown*. The eyes *red*.

Nests.—BAILLON'S CRAKE is *supposed* to have nested in the English fen district in recent years, but the evidence is not conclusive. Abroad, it breeds in Western and Southern Europe; in many parts of Asia, including Northern India; and far south in Africa.

The nesting habits and eggs of BAILLON'S CRAKE are similar to those of the LITTLE CRAKE; but the eggs are smaller in size.

BAILLON'S CRAKE is a *very rare* visitor in spring and autumn to the British Islands, having been obtained about a score of times in England; twice in Scotland; and on three occasions in Ireland.

LETTER XXII

BUSTARDS, STONE CURLEW, CREAM-COLOURED COURSER, PRATINCOLE, AND DOTTEREL

THE GREAT BUSTARD

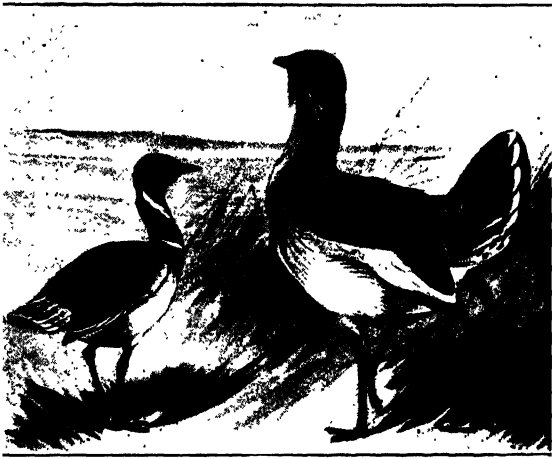
Length.—45 inches. (Female, 36 inches.)

Weight.—25 lbs. to 30 lbs.; a very fine one, 32 lbs. to 34 lbs. (Female, 14 lbs. to 18 lbs.)

Markings.—With the aid of the illustration on the next page, you could not possibly confuse the GREAT BUSTARD with any other British bird. Its immense size, and comparatively small feet (without a hind toe) are sufficient to identify it at a glance. The adult male has a tuft of thin white feathers, like bristles, on each side of the chin, just below the base of the bill.

Nests.—The GREAT BUSTARD nests on, and in the neighbourhood of, the great plains of Germany, Poland, Hungary, Southern Russia, Spain and Por-

tugal; and was formerly a summer visitor to Southern Sweden. It is also a common breeding species on the Steppes of Asia. The nest is a mere hollow scraped in the ground, and in which two or three large eggs



LITTLE BUSTARD GREAT BUSTARD
(Summer plumage)

of *olive green* colour, marked with *reddish-brown*, are laid.

As the WHOOPER SWAN is our noblest wild water-fowl, so the GREAT BUSTARD is much the finest among the wild land-birds that wander to the British Islands.

The GREAT BUSTARD, though common to parts of England, as a resident, down to and during the closing years of the last century, has disappeared since the enclosure of nearly all our wide tracts of open barren country, and is now only a chance straggler that visits us from the continent of Europe.

The first three or four years of the present century saw the extinction of the GREAT BUSTARDS which at that period still nested on Salisbury Plain. A few of these birds, however, survived in East Yorkshire till the year 1832, and in Norfolk until about 1840.

The cultivation of wild bare land was the chief cause of the extermination of the GREAT BUSTARD in its natural haunts in Britain, and there is also little doubt that such a handsome, conspicuous bird was more likely to be persecuted as sporting guns were improved, and generally used.

The GREAT BUSTARD, though now a *very rare* straggler to our Islands, is, however, obtained at intervals, chiefly in England. In some years two or three, or even more, are observed or shot; then for a year or two, perhaps, none visit us.

There are no authentic records that the GREAT BUSTARD was at any period a resident in, or a visitor to, Ireland. In Scotland there is evidence that the GREAT BUSTARD nested in limited numbers in the south-east of that country down to the sixteenth century.

THE LITTLE BUSTARD

Length.—16 to 17 inches.

Markings.—The adult male, in summer, has the neck and breast *black*, with two conspicuous bands of *white*; one extending from the nape obliquely down each side of the neck and meeting at the middle of the fore-neck, the other crossing the centre of the breast (see p. 256).

The top of the head, and the back, *sandy-brown*; the former streaked with *black*, and the latter crossed with fine *black* lines. The under-parts below the breast, and the smaller wing-feathers, *white*.

In winter, the male loses the *black* and *white* bands on the neck, which is then *sandy-brown* streaked with *black*.

The female has no *white* bands on the neck, and somewhat resembles the male in his winter plumage, but has her upper-parts blotched, instead of finely waved, with *black*.

Nests.—In Southern Europe; also in Central Europe, in the valley of the Danube, and thence eastward to Turkestan; and in the north-west of Africa. The nest is placed on the ground among herbage, and is slightly formed of grasses. The eggs are glossy *greenish-brown* in colour, and three or four in number.

The Little Bustard, though its body is but slightly larger than that of a Grouse, resembles the Great Bustard in its general aspect, in the form of its legs and feet, and in the absence of a hind toe. It is a *very rare* winter visitor to the British Islands, that has been recorded a good many times in England; on four occasions in Scotland; and but thrice in Ireland.

MACQUEEN'S BUSTARD

Length.—26 to 28 inches.

Markings.—The adults of both sexes, in summer and winter, have a *crest* of black-tipped *greyish-white* feathers on the top and back of the head. A large tuft of *black* plumes, intermixed with a few *white* ones, on each side of the neck, and forming a conspicuous ruff that droops over the shoulders. The bill is proportionately much longer than in the Bustards previously described, but otherwise this bird resembles the other Bustards in form, and somewhat in the colour of its plumage.

Macqueen's Bustard is a native of Western and Central Asia, and has only twice occurred in the British Islands (Lincolnshire 1847, Yorkshire 1892).

THE STONE CURLEW

Local names.—NORFOLK PLOVER, THICK-KNEE, and sometimes erroneously 'LITTLE BUSTARD.'

Length.—15 to 16 inches.

Weight.—16 oz. to 18 oz.

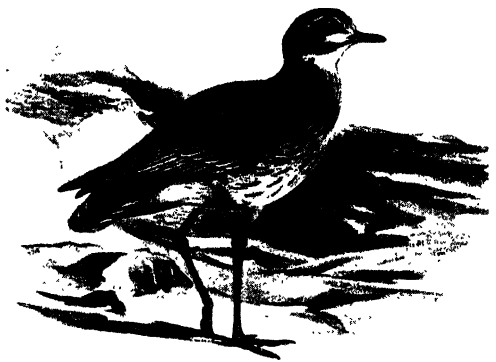
Markings.—The adults of both sexes, in summer and winter, have the chin, throat, and a streak under each eye, *white*. The head, back, wings, and tail, *pale brown*, each feather streaked with *dark brown*, and edged with *buff*. The neck, breast, and sides, *yellowish-white*, streaked with *dark brown*; the abdomen *dull white*; under the tail *pale chestnut*. The long feathers of the wings nearly *black*; the lesser wing-feathers edged with *white*, forming two narrow stripes across the wing.

The bill *yellow*, tinged with *green* at the base, and *black* at the tip. The legs and toes *yellow*. The eyes *very* large and round, and of a bright *golden-yellow*.

Sometimes known as the THICK-KNEE, by reason of the enlarged condition of the joint of each 'knee' (really the heel) in the young bird.

The feet and legs of the STONE CURLEW are similar to those of a BUSTARD, and have also no hind toe.

Nests.—The STONE CURLEW breeds sparingly in several parts of the British Islands, chiefly on the bare chalk downs and sandy warrens of the southern and eastern counties of England.* In Ireland, Scotland, and Wales the STONE CURLEW does not nest.



STONE CURLEW

The nest of the STONE CURLEW is a mere scraping in sandy soil or on stony ground. The eggs are two in number and rather oval in shape. In colour they are dull *yellowish-brown*, boldly streaked and spotted with *dark brown* and *grey*.

* The Stone Curlew frequents many localities in England that were formerly resorts of the Great Bustard, being more numerous on Salisbury Plain than elsewhere in the British Isles.

The STONE CURLEW arrives in the spring, and, with a few exceptions, departs in the autumn. Though nowhere numerous, it is not uncommon locally in Dorset, Wiltshire, Berkshire, Sussex, Suffolk, Norfolk, Lincolnshire, and Yorkshire; in all of which counties I have from time to time seen it, either singly or in small numbers, when partridge shooting in September. In Ireland the STONE CURLEW has been procured but seven or eight times; in Scotland only once.

THE CREAM-COLOURED COURSER AND THE PRATINCOLE

are *very rare* wanderers to the British Islands. The CREAM-COLOURED COURSER has been obtained about twenty times in England; twice in Wales; and once in Scotland; but not in Ireland. It is a native of Northern Africa and Southern Asia.

The PRATINCOLE has been recorded on a score occasions in England; once in Wales; but not in Scotland. In Ireland a specimen is *supposed* to have been killed some fifty years ago. The PRATINCOLE is a summer visitor to Southern Europe.

Both these birds are allied to the true PLOVERS. The PRATINCOLE has long pointed wings and a forked

tail like a swallow. The CREAM-COLOURED COURSER resembles a BUSTARD in build, and, as its name implies, is chiefly *isabelline* in colour.

THE DOTTEREL

Length.—9 inches (females, 9½ inches).

Weight.—4½ oz. to 4¾ oz. (adult female, 5 oz. to 5¼ oz).

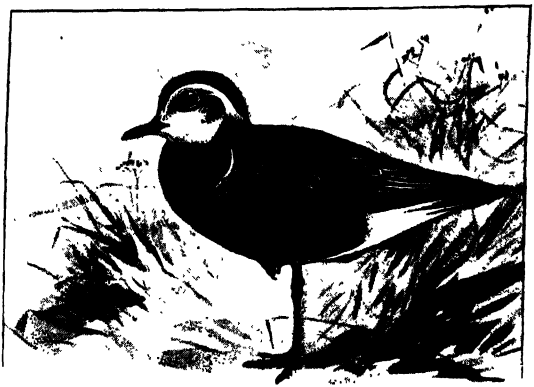
Markings.—In summer, the adults of both sexes have the top of the head *brownish-black*, margined by a conspicuous curved *white* band which passes over each eye and meets on the nape of the neck. The forehead, cheeks, chin, and throat, *white*. The upper-surface *greyish-brown*, the feathers edged with *reddish*. The fore-neck and breast *brownish-grey*, the latter with a semicircular cross-band of *white* bordered above with *black*. The lower breast and sides *bright chestnut*; the abdomen *black*; under the tail *white*.

The females are larger and brighter in colour than the males.

The young birds in autumn have the feathers of the upper-surface, and those of the crown of the head, edged with *reddish-buff*; the breast mottled with *dull brown*, its *white* band inconspicuous.

Legs and toes *yellow*. Hind toe absent.

Nests.—The DOTTEREL nests very sparingly in the north-west of England; more freely in Scotland; but not in Ireland or Wales.* Abroad, the DOTTEREL breeds numerously in Norway, Sweden, and Northern Russia; also in Siberia, both north and south of the Arctic Circle. The chief breeding resorts of the



DOTTEREL
(Summer plumage)

DOTTEREL in Britain are on the broad tops and slopes of the Grampians, where, at an elevation of perhaps not less than 3,000 feet, the nest is formed on stony, mossy, or grassy ground. It is a mere scraped hollow, sometimes lined with short pieces of grass.

* The only breeding-haunt of the Dotterel in England is in the Lake district of Westmoreland and Cumberland, but during recent years the bird has been all but exterminated in these parts.

The eggs are three in number, and of a deep *dull buff* ground colour, blotched with *dark brown*.

DOTTEREL arrive in the spring, in small flights, in the south-east and east of England, on their way to their usual northern breeding-quarters; and pass us again in August and September, on their return journey southwards. A small proportion of the birds that visit our Islands in the spring remain to nest, and then, with their young, they bid us good-bye in the autumn to winter in Northern Africa.

The DOTTEREL is an uncommon bird in Wales and in the west of England, and is a rare visitor to Ireland.

I have never met with a DOTTEREL in the British Islands in winter, but I have seen them in spring resting on large fallow and rough pasture fields in the north-east of England. DOTTEREL only remain a few days in such districts, and then pass on, and are undoubtedly becoming scarcer every year in their old haunts.

About forty years ago DOTTEREL shooting was a common amusement on the moors and wolds in the east of Yorkshire. The birds appeared in certain well-known localities in the first half of May, and within two or three days of the same date annually. They were shot as they sat in small gatherings on the ground, for you can usually walk to within a score yards of

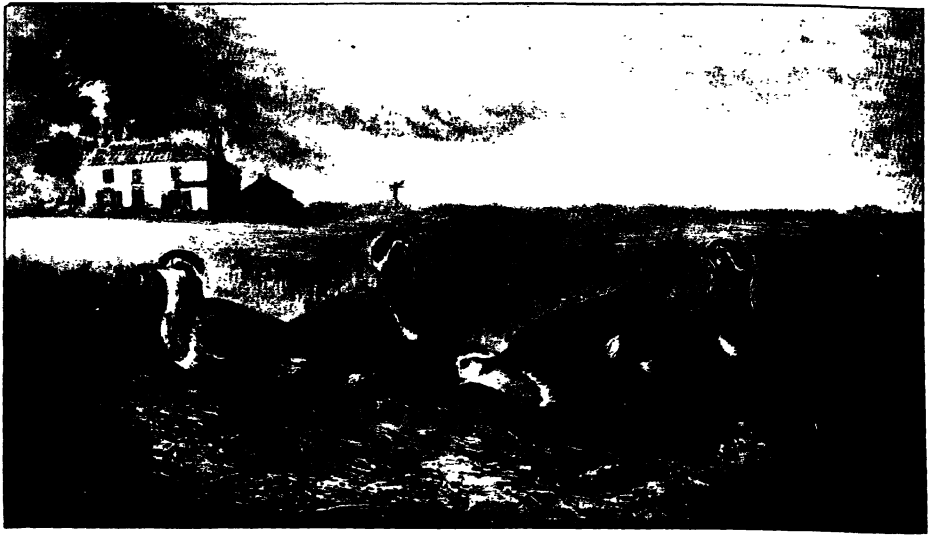
Dotterel and fire at them, and they will alight again at a short distance and await a further bombardment.

It used, in the county named, to be a 'sport' that was much looked forward to, and residents in a neighbourhood frequented by Dotterel were instantly informed of their arrival by messengers on horseback, for it was a matter of following the birds at once—a day's delay and they might be gone.*

In the wold country of East Yorkshire, and not far from the coast, there is still an old inn called 'The Dotterel.' It stands in a district that was formerly a famous resort for these birds, during their migration northward in the spring. This inn was much patronised by shooters when the flights of Dotterel appeared, and its sign-board represents a little 'trip' of these birds.

The quaint sign of the 'Dotterel Inn' I have ascertained to be at least seventy years old. The four birds on it were correctly painted as standing in the centre of a large field. Unfortunately the sign was a short time since sent to a 'local artist,' to be repaired, and he, considering the original and truthful landscape uninteresting, substituted sea-cliffs and a rocky shore; but, worst of all, he *improved* the Dotterel by colouring their necks and breasts *white*;

* A friend of the author's (the Hon. George Lascelles) some years ago, with a fellow-sportsman, killed thirty-two Dotterel in one day on the wild open ground (near the training stables) at the summit of the Hambleton Hills in North Yorkshire.



SIGNBOARD OF THE 'DOTTEREL' INN

for, as he remarked afterwards, he was not sure whether they were land or sea-birds!

The illustration opposite shows the sign-board as I have had it restored. The position and outline of the Dotterel are unaltered; but they are now correctly represented as regards their plumage, and a view of the inn and its surroundings is substituted for the boulder-strewn sea-coast.—(June, 1895.)

LETTER XXIII

PLOVERS

Note.—Our three, and what I may term COMMON PLOVERS, are the 'GREEN PLOVER,' the 'GOLDEN PLOVER,' and the 'GREY PLOVER;' though the latter is far the least numerous of the trio. I allude to them thus distinctly because the two last-named are so often confused, which is due to the *true* GREY PLOVER being very seldom seen except on the coast; while the 'GOLDEN,' owing to its light plumage, is frequently termed inland the GREY PLOVER.*

THE GREEN PLOVER

Local names.—PEEWIT, PEESE-WEEP, PIWIPE (from its cry), LAPWING (from its slow flapping wings), BLACK PLOVER (from the dark colouring of its upper plumage and wings, as contrasted with the GOLDEN PLOVER).

* The Ringed Plover is also common, but as it is essentially one of our smaller Waders, and is as often called the Ringed Dotterel as the Ringed Plover, I do not include it with the above three birds.

Length.—12 to 13 inches.

Weight.—8 oz. to 10 oz.

Too well known to need description. Abundant

GOLDEN PLOVER GREEN PLOVER GREY PLOVER
(Summer plumages)

and generally distributed in the British Islands, wherein it nests very freely.

The young and old of the GREEN PLOVER that have been scattered about our fields, marshes, and moorlands, during the summer, collect in large gatherings in September, and, if the weather is fine, remain inland till the middle of October, at which date most of

them either leave for the neighbourhood of the tidal estuaries or else pass on to a warmer climate than ours. In addition to the GREEN PLOVER that have nested with us, large flights migrate to the British Islands in the autumn from northern countries, and the majority of these, after resting a short time on our fields and shores, journey to more southern latitudes for the winter.

There is no handsomer bird than the GREEN PLOVER: the metallic green and violet gloss on its wings and back; the long delicate feathers of the crest; the rich purple black of the throat, neck, and upper breast: and the snowy whiteness of the under-parts; are beautiful in their contrasts of colour.*

The GREEN PLOVER, in the flesh, cannot well be mistaken; when *cooked*, you may know it by the presence of its well-developed *hind toe*; so bear in mind if a bird *called* a GOLDEN PLOVER (for which you will be charged double the price of a GREEN PLOVER) is served up at an inn or club, that the GOLDEN PLOVER has *no hind toe*, and the GREEN PLOVER *has* one.

HOW TO FIND THE EGGS OF GREEN PLOVERS

As the GREEN PLOVER is resident with us in such large numbers, I have never had any hesitation in

* In winter the chin and throat are white.

seeking its eggs, more especially as I find they are a great treat to the invalid. The time of year when the eggs of the GREEN PLOVER are most valued and taken is in the first half of April. These early eggs are out of the *first* nest made by the bird, not *one* in a *dozen* of which, even if left undisturbed, hatch; the shelter for them being so slight that rooks and crows, frost and wet, destroy far the larger proportion. If the spring-laid eggs of a GREEN PLOVER are broken, removed, or spoilt, as commonly occurs, she makes another nest when the grass and herbage afford better concealment from egg-sucking birds and prowling bipeds, and when frosts and storms are not prevalent. It is from this *second* nest that our young GREEN PLOVER are mostly produced.

What is termed the nest of the GREEN PLOVER is merely a small scraping in the ground, lined with a few blades of dry grass. In this depression, which is often on bare open soil, the first egg is usually laid between the 1st and 5th of April.

When seeking eggs, it is the cock bird that you have to outwit, for he is sure to be keeping watch on some small elevation not far from the hen, and, unless you are stealthy in your movements, he will see you instantly and rise at once to scream and gyrate overhead, though his erratic motions will not give you the slightest clue to the position of the eggs.

Just as your attention is attracted to the cock bird, *always* the *first* to show, the hen, warned by his cries,

slips quietly from her nest, at *first* runs, and then flies away low and straight; 'tis odds you never even saw her. If the cocks are disturbed and are wheeling and screaming in the sky, every hen will be off her nest in the vicinity, *unless* their eggs are near hatching.*

To find the eggs of Green Plover, you should *very* quietly approach (in the *early* morning) the field or marsh you *know* contains nests *somewhere*, and, if possible, do this when there are *no* male birds flying about. Then *suddenly* show yourself and mark the hens as they flap away *straight* and *low* from their nests (they have not time to run). Where *these* rise from the ground you will discover eggs, if you can localise the birds as they spring—a matter of practice.

If the eggs are bright and *clean*, they are fresh and fit to take, but if they are stained brown from contact with the muddy feet of the hen, she has sat upon them; should the eggs be *warm*, there is, of course, then no doubt incubation is in progress.

Placing the eggs in water to see if they sink or swim, or whether their round or pointed ends turn upwards, is, I have found, a quite unreliable test of their freshness or the reverse.

I have trained terriers (a poodle is best) to find

* When not engaged in sitting, the hen bird will, for a great part of the day, stand or run about close to her nest, especially when she has nearly completed her number of eggs.

Plover's eggs, and this is how to do it. Previously lay a piece of cheese or cake in a Plover's nest among the eggs; encourage the dog to hunt from a little distance till he finds the tit-bit, which then make a show of giving him from between the eggs for the first few times he is successful. Next gradually teach him (the same nest will do all through his first lessons) to *downcharge*, just clear of the eggs, *till* you give him the cake or cheese. By degrees you can train a dog to find all the Plover's eggs in a field, by rewarding him with a morsel of food as though taken out of each nest as he finds it. In this manner it is quite simple to educate any dog, who is not a fool, to systematically hunt for Green Plover's eggs, and to await your approach as he discovers a nest. Such a dog will be the means of putting more eggs in your basket in an hour than *you* will, *without* his aid, gather in a morning.

How to Shoot Green Plovers

You may often see scores of Green Plovers sitting, looking as innocent as may be, on a meadow or fallow, but just try to shoot a few, or even *one bird*, and you will soon realise how difficult a task it is; and as to walking up to them till you arrive within shot, why you might as well try to walk to the moon.

Well, as the Plover will not permit you to approach *them*, you must induce them to come to *you*, and I

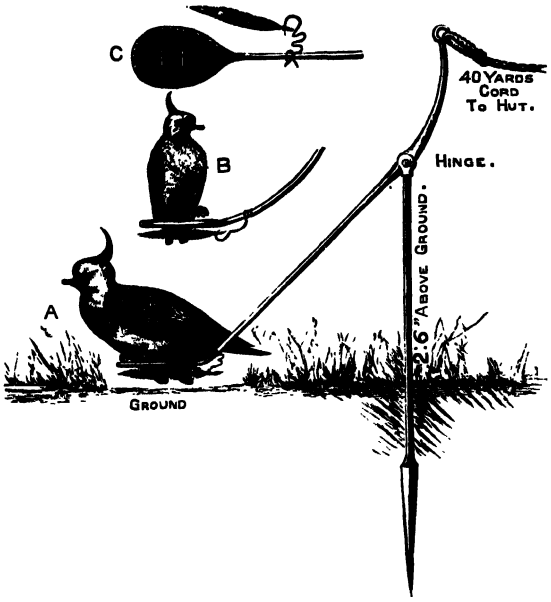
will describe a method of alluring these birds by which I have killed large numbers.*

First of all you will require a live GREEN PLOVER to act as a decoy. Now this *may* be a wing-tipped one; but what is far-better is a young one that has been caught in the fields in summer (with a trout landing-net before it can fly), and, with its wings clipped, so that you can catch it when necessary, turned into a fenced garden.

Secure this live bird as shown on the opposite page. Fasten a forty-yard cord to the short arm of the iron rest, and, holding the loose end of the cord in your hand, hide in a shelter-hut of boughs, which should be placed under a hedge, or among bushes, near the locality frequented by the PLOVERS.

In addition to the *live* decoy you will also require *Stales*, as they are called; these should consist of a dozen GREEN PLOVER that have been stuffed by a bird-preserver, each having six inches of strong copper wire projecting from either leg, so that by inserting the

* Though Green Plover haunt our fields and fens in thousands, yet *very few* are killed with the gun, nearly all offered for sale in the game-shops are *netted*. I have netted a great many, taking them with a spring net *on the wing* as they swoop over the decoys, the net being released by a cord of 200 yards in length; a very pretty amusement that requires a quick hand and eye, for if the net is sprung one second too soon you miss every bird, instead of meshing, perhaps, forty or fifty at a catch, as I have often done.



Iron Rest for Live Decoy Plover

A. Is a live decoy bird in the rest.

B. Live decoy, as seen facing, and showing how a strong clipped feather (tied to the rest) is pushed through the loops formed by the bent legs of the decoy bird to secure it from escape.

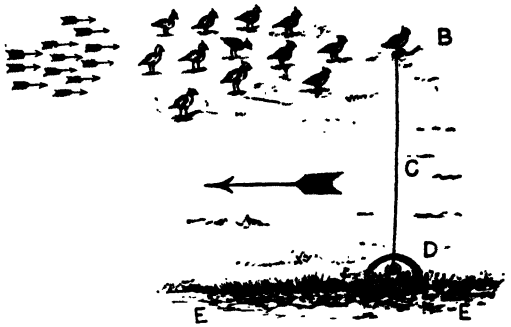
C. Is the small ($2\frac{1}{2}$" × 2") ring at the end of the long arm of the rest, with strong soft flannel sewn across it, and showing the holes through which the leg joints of the bird are inserted. These holes are each an inch long, $\frac{1}{4}$ in. wide, and 1 in. apart.

N.B. The small hemmed slits in the flannel shown in C just permit the leg joints to pass through them, but *not* the feet of the bird.

The material of the iron can be about the substance of a lead pencil; its long arm 3 ft., its short one above the hinge 1 ft.

On pulling the cord the decoy is jerked off the ground, and then opens its wings as if flying.

wire in the ground you can make these stuffed birds stand up as natural as in life.



PLOVER SHOOTING

A. The twelve stuffed decoys.
B. Live decoy in the iron rest.
C. Pulling cord forty yards from the hut to the live decoy.
D. Hut in which sportsman is concealed.
E E. Hedge in which hut is placed.
Large arrow points with the wind.
Small arrows fly in the direction in which the Plover will come to the decoys.

N.B. In this case the Plover will cross the shooter from his left to his right. If the wind is the opposite way the stuffed decoys and the live one will have to be faced in the reverse direction, and the wild birds will then cross the shooter from his right to his left. The Plovers will invariably fly to the decoys against the wind, and the object of placing the latter as here shown is to enable the shooter to fire at the wild birds as they pass in front of him, for he can then not only kill them and see them coming far better, but they will also take less notice of his hut as they approach.

If, on the other hand, the wind were to blow from the hut to the decoys, or from the decoys to the hut, the Plover, as they arrived head to wind, would fly straight toward or else over the *shooter from* behind him, and his chances of success would be small.

Place *all* the stuffed decoys without fail *head* to *wind*, about forty yards from your shelter-hut, and near the live decoy, as shown above.

Now either send a man to put the PLOVER in the vicinity on wing, or else wait patiently till they appear; as soon as you see any flying in the distance pull the cord (as you sit in the hut) so as to make the live decoy flap its wings, and also blow the PLOVER call. You will be astonished from how far off the birds will alter their flight to visit the decoys, *and*, as a result, come within range of your gun.*

The call is *indispensable*, but it requires to be a *very good* one. The ordinary PLOVER call sold in shops is a mere *whistle* (a post-horn would be just as useful), and bears no resemblance to the shrill *squeaking* pipe of the GREEN PLOVER.

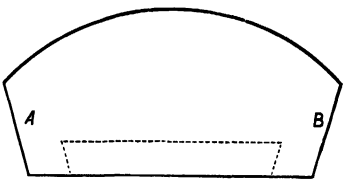
Here is a GREEN PLOVER call that will, with the aid of the decoys, bring the birds right up to you *if* you are *well concealed*. It is one I always carry in a little leather case (to keep it clear of dust) in my waistcoat pocket, and many a GREEN PLOVER has it brought to the gun, even when I was PARTRIDGE shooting, as well as when decoying the birds from a shelter-hut. (See next page.)

* Woodpigeons can be very successfully killed in just the same manner as shown on p. 276 (merely substitute the word 'Pigeon' for 'Plover'). Use, however, the contrivance described at the end of this letter for holding the live decoy Woodpigeon.

HOW TO MAKE AN EFFECTIVE GREEN PLOVER CALL

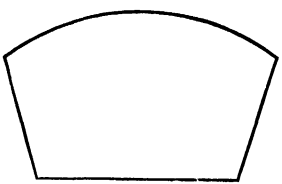
Cut out with a pair of short, strong, scissors from a sheet of thin tin (such as the top of a biscuit box) a piece as outlined No. 1.

No. 1



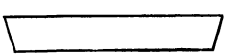
Then a second piece as No. 2.

No. 2



Next a little bit of thin tape like No. 3.

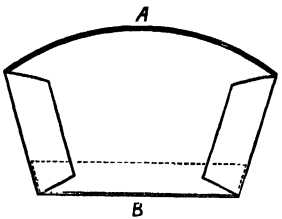
No. 3



Now lay the tape in the centre of, and level with, the lower edge of No. 1, as indicated by the dotted line thereon. Place No. 2 over the tape and centre of No. 1, and turn down the projecting sides A B of No. 1, inwards, and *tight*, over No. 2 with a pair of

pincers, and all will then be as in No. 4. The dotted line in No. 4 shows the position of the tape as enclosed *between* No. 1 and No. 2.

No. 4



Next separate with a knife blade the rounded tops of No. 1 and No. 2 at A in No. 4 till a sixpenny-bit could, if desired, be inserted nearly half-way down between them; then also separate their lower edges, along the tape at B, to about the extent of the thickness of thin writing-paper only.

Blow through the rounded end of the call at A, the tape will vibrate, and you have the *exact* imitation of the cry of a GREEN PLOVER, and one that can be heard for a long distance.

The *best* position to occupy for decoying GREEN PLOVER to the gun, is when you can conceal yourself among whins and bushes that are near the *centre* of a large field or marsh; for it is the habit of these birds to seek the middle parts of enclosed land, and to avoid the hedges and walls. At the same time I *have*

killed a great many when my decoys were set within forty yards of a hedge.*

THE GOLDEN PLOVER

Local names.—WHISTLING PLOVER (often misnamed the GREY PLOVER).

Length.—10 to 11 inches.

Weight.—8 oz. to 10 oz.

Markings.—The adults of both sexes, in winter, have the top of the head, the hind-neck, the back, and the wings, *brownish-black*, and closely spotted (the long feathers of the wings excepted) with *golden-yellow*. The chin, throat, and abdomen, *white*. The front of the neck and the breast *greyish*, variegated with *yellowish-brown*.

In summer, the ground-colour of the upper-parts is darker, becoming *black*. The sides of the head below the eyes, and the under-parts from the chin to the tail, *deep black*, and separated from the *golden*-spotted plumage of the upper-parts by a border line of *white*. Under the tail *white*.* *No hind toe.*

* Golden Plover will come freely to Green Plover decoys, and to the Green Plover call, as both the 'Green' and 'Golden' are wont to associate. No. 7 shot is the size to use for shooting Plover.

Nests.—Freely on the moors and wastes, both high and low-lying, of Scotland, Ireland, and the North of England; less numerously in Wales; somewhat sparingly in the south and centre of England; and never in the east of England, save on the moors of Yorkshire, Durham, and Northumberland.

Abroad, the GOLDEN PLOVER nests in suitable localities in Northern and Central Europe; and in Western Siberia.

The nest is a slight scraping in the ground, usually on a bare place, but sometimes among short grass. The eggs are four in number and somewhat resemble those of the GREEN PLOVER, but are richer in ground-colour and are beautifully blotched and spotted with *black* and *brown*.

The *first* flights of GOLDEN PLOVER that arrive on our coasts in the early autumn sojourn thereon for

* A young Golden Plover in its first winter is much more washed with brown on the breast than an old bird, and its abdomen is also considerably darker.

In early spring, when assuming, and in autumn when discarding, their summer plumage, the adults show a good deal of white mottling among the black of their under-parts.

The females of the Golden Plover are said to be less uniform in their markings than the males; the black of summer being browner and intermixed with white, and the white of winter shaded with brown. This state of plumage is, however, due to age, and is not a distinction between the sexes.

I have had dissected many of the brightest and purest coloured Golden Plover I could select out of a large number, in order to ascertain their sex, and have found the males and females, *when adult*, are identical to all outward appearance.

a short time *before* they disperse inland, and are, I have remarked, chiefly composed of *young* birds, which have either been hatched abroad, or else have collected from the various localities in the British Islands where they were bred.

In October, large numbers of old birds and young arrive, both on the coast and inland, the majority being probably migrants from Northern Europe.

If frost sets in, GOLDEN PLOVER resort to the ooze-banks of the tidal estuaries, as they cannot procure their food on frozen fields and marshes. Should the frost continue, away they all go southward, and are not, as a rule, seen again till March, when returning to their nesting quarters; but if the cold weather is only of short duration they seek their inland haunts again, though by the end of November the bulk of the birds have usually left us for more southern countries.

On the shores of Ireland I have seen GOLDEN PLOVER in vast 'stands' up to the middle of December, particularly when frost has driven them from the bogs and wet meadows in which they feed.

As the climate of Ireland is milder than that of England and Scotland, GOLDEN PLOVER may usually be met with in the sister Isle throughout the winter in fair abundance.

A friend of mine once obtained 160 GOLDEN PLOVER at one discharge of his stanchion-gun in Ireland, and I have often in that country picked up

60 to 70, and once 90, after a shot from my fowling-punt.

If a number of GOLDEN PLOVER pass overhead and you fire and drop a few, remain *motionless* for a time, for if there is a *winged* bird or two on the ground these are pretty sure to *decoy* the entire flight once more within shot.

THE GREY PLOVER

Local names.—SILVER PLOVER, SAND PLOVER, SAND COCK, SEA COCK.

Length.—11 to 12 inches.

Weight.—8 oz. to 10 oz.

Markings.—The adult male and female, in winter, have the head and upper-parts *greyish-brown*, closely spotted with *white*. The front and sides of the neck, and the breast, *dull white*, streaked with *pale brown*. The tail *white* and barred with *black*. (This bird, though a little larger, is very similar in form to the GOLDEN PLOVER, but instead of *golden* spots, it has *white* ones on its upper plumage.)*

* The young Grey Plover in their first autumn show many greenish-yellow spots on their upper plumage. When adult there is little noticeable difference in colouring between the male and female of the Grey Plover.

In summer, the sides of the head below the eyes, the front and sides of the throat and neck, the breast, and the abdomen, are rich *black* (the same as these parts are at that season in the Golden Plover). The top of the head nearly *white*, the back and wings boldly blotched and barred with *black* and *white*.

The bill *longer* and comparatively *much stouter* than in the Golden Plover. *A small hind toe.*

Nests.—The Grey Plover has been found nesting in a few parts of the Arctic regions of Eastern Europe, Asia, and America. The nest and eggs resemble those of the Golden Plover.

When flying, the 'Grey' may be distinguished at *any* season from the Golden Plover by its conspicuously *white*-marked *tail*, and by the tuft of *black* feathers that then show on the sides under the *wings*. It may be also known in winter by its *white* and *grey* appearance.

Besides these characteristics, its *large strong bill; white spots;* and, above all, its *small hind toe*, easily identify it when killed.

The Grey Plover is *never* seen during winter in the British Islands in flights like the Green and the Golden Plover. It is a coast-frequenting bird,

and I have rarely heard of a GREY PLOVER inland, except on marshes within view of the sea.

From two to three, to little trips of eight or ten, GREY PLOVERS may often be noticed flying about the flats of our tidal estuaries in winter; but, though not a scarce bird, I have seldom encountered over a score GREY PLOVERS together, save in the spring and early autumn, when they were migrating to or from their breeding grounds in the Arctic regions. On these occasions GREY PLOVER may sometimes be seen passing along the east coast of England and Scotland in large numbers.

To assist you to identify the three PLOVERS described in this letter I append a sketch of their feet.

GOLDEN PLOVER
(No hind toe)

GREEN PLOVER
(A long hind toe)

GREY PLOVER
(A short hind toe)

A DEADLY AND SPORTING METHOD OF KILLING WOODPIGEONS

(I) Lay side by side two lengths (each 2 ft. long) of stout soft string and knot them together in their centre (Fig. A).

(II) Place the central knot of the string over the middle of the pigeon's breast (Fig. B), and, on either side of the bird, pass one end of the string *under* the wing and one end just in *front* of the wing (Fig. B).

(III) Turn the bird breast downwards, bring the four ends of the string in contact and fasten them all together in *one* knot, the *latter* being *close* down on the *back* of the bird between its shoulders (Fig. C). Cut off the superfluous string above the knot.

(IV) Firmly tie one end of a piece of 6 in. cord round the neck of this large knot on the bird's back (D, Fig. C). Tie the other end of the short cord to the eye at the extremity of the long arm F (D, Fig. E). The decoy cannot now escape, yet is able to move about or spread its wings (Fig. E).

[Young Woodpigeons, or Stock Doves, reared from the nest make the best decoys, though a large blue tame Pigeon answers fairly well.]

On pulling (from your shelter-hut, p. 276), the 40-yard line H H, that runs over the little wheel, seen at the top of Fig. K, the long hinged arm F jerks the pigeon off the ground and causes it to flutter as if rising or settling.

[In this way you can decoy Woodpigeons within range of your gun one by one throughout the day.]

The small chain G holds up the arm F from falling, and the latter, by means of the chain, can be adjusted at an angle that will keep the decoy on its legs.

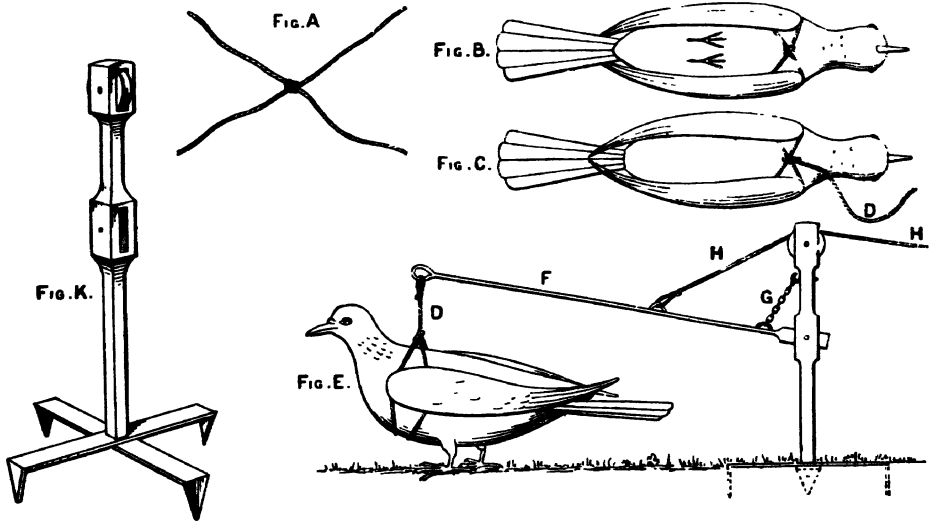
Fig. K is an enlarged view of the upright standard in which the arm F and the pulling line H H work. This upright can stand 1 ft. above ground, its supporting cross-pieces being stamped in level with the soil.

The upright may be $\frac{1}{2}$ in. square (iron).

The round arm F to be 2 ft. 6 in. long by $\frac{1}{3}$ in. thick (iron).

When pigeon-shooting act precisely as told on p. 276 in regard to Plover. Place the live decoy (and the stuffed ones) in a field which the birds frequent for food (as turnips in frost or snow). Choose a dark, windy day.

My friend Mr. T. Sowerby of Putteridge Park first showed me this device. I have made many fine bags by its aid, and two winters since, on an estate within some thirty miles of London, three young sportsmen of my acquaintance killed, using live decoys as here described—'300 woodpigeons in one day, over 1,000 in one week, and 3,000 in a month.'



HOW TO ARRANGE A LIVE PIGEON SO THAT IT ACTS AS A DECOY TO THE WILD BIRDS

LETTER XXIV

PLOVERS (*continued*)

THE RINGED PLOVER

Local names.—RINGED DOTTEREL, STONE RUNNER, STONE-HATCH (the latter name from the habit of placing its eggs on small stones and gravel).

Length.—7 to 7¾ inches.

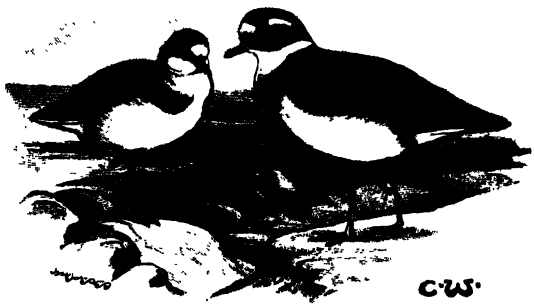
Weight.—2¼ oz. to 2½ oz.

Markings.—The adults of both sexes, in summer, have the crown of the head, and the upper surface of the body, *greyish-drab*. The forehead, and a streak behind the eye, *white*. A band across the top of the head above the eyes, and a patch extending from the base of the bill and covering the cheeks, *black*. The chin, and a collar round the neck, *white*. A broad breast patch, narrowing and passing round the neck, *black*. The rest of the under-surface *white*.

The bill *orange yellow* at its base to *black* at the end. The legs and toes *orange yellow*. Hind toe absent.

The females are *said* to be less bright in plumage than the males, but I have never found this the case to any noticeable extent.

In winter, the markings are similar, but the colouring is a little duller than in summer, due to the *black*



KENTISH PLOVER RINGED PLOVER

portions of the plumage being washed with *grey*. The young birds have the parts that are *black* in the adult, *brown*; and their bills and feet are *dark brown*.

Nests.—The RINGED PLOVER nests rather freely on those portions of our sea-board where there are extensive sands, and it also breeds sparingly on sandy

wastes inland. Abroad, the RINGED PLOVER nests chiefly on the coasts of Europe, Greenland, Iceland, and Northern Asia and Africa; and also, though less numerously, inland on the shores of large rivers and lakes.

The nest, a mere hollow in sand or shingle, is usually placed either well above high-water mark on the coast, or on the gravelly margins of lakes and rivers that are not far from the sea, though I have occasionally found the eggs on bare dry warrens. The eggs, four in number, closely resemble their surroundings, being of a *pale sandy* or *stone* colour with small *black* spots.

I consider this bird the most beautiful of all our PLOVERS; not only is its plumage most handsome, but its habits are extremely interesting, and its flight and movements very graceful.

In the breeding season, the male RINGED PLOVER will follow you at but a few yards distance in his anxiety to decoy you from the vicinity of the nest; he will run about close at hand, uttering the while his tuneful whistle, and he will sometimes fly a short space ahead and then return to resume his sprightly actions almost at your feet. The female on such occasions usually regards the proceedings from a small eminence a little way off.

RINGED PLOVER, in the autumn, are generally dis-

tributed on our shores, and early in that season may be seen in small flights, consisting chiefly of young birds (with brown heads and breast patches) that have collected on the coast, and which, after a time, are joined by large gatherings of adults.

About the 1st of October young and old commence to move southwards, and by the middle of that month the majority have disappeared, and do not revisit us till the spring on their return north. There are, however, always a fair number of Ringed Plover to be observed on the sands and ooze-banks of our tidal estuaries throughout the winter, sometimes in little trips by themselves, but more often intermixed with the wisps of Dunlin, and very pretty they appear as they run so nimbly hither and thither seeking their food.

I have frequently seen Ringed Plover in autumn, generally single birds, on the banks of our rivers and lakes inland.

THE KENTISH PLOVER

Local name.—Kentish Sand Plover.

Length.—6 to 6½ inches.

Weight.—1½ oz. to 1¾ oz.

Markings.—The adult male, though about a third

smaller, is somewhat similar in appearance to the adult of the RINGED PLOVER. The most noticeable differences are:—

(1) The male KENTISH PLOVER, in summer, has the centre of the upper breast *white*, with a *black* patch on each side above the shoulder. These black patches, however, do *not* meet to form an unbroken band of *black*, such as crosses the breast of the RINGED PLOVER (see illustration, p. 288).

(2) The top and back of the head of the KENTISH PLOVER are *chestnut*.

(3) The *bill*, *legs*, and *feet* are *black*. (The base of the bill, and the legs and feet of the RINGED PLOVER are *orange*.)

The female KENTISH PLOVER, in summer, has the breast patches, and the band across the fore-part of the crown, *greyish-drab*, like the back. In winter, both sexes are very similar to the summer plumage of the female, the characteristic markings of the male being somewhat obscured at that season.

Hind toe absent.

Nests.—Very sparingly in the south of England, on the coasts of Kent and Sussex; numerously in the Channel Islands.

Abroad, the KENTISH PLOVER breeds on the shores of Western Europe, the Mediterranean and Black Seas, and in Central Asia. Its nesting habits re-

semble those of the RINGED PLOVER, as do the eggs, but the latter are *scribbled* as well as spotted with *black*.

The KENTISH PLOVER is a summer visitor to us, which arrives in April, and leaves with its young in September. It formerly nested freely in Kent and Sussex, but from the raids of egg-collectors and other causes it has lately become much reduced in numbers, and, unless protected, shortly promises to be extinct as a British-breeding species.

With the exception of the few that nest in Kent and Sussex, the KENTISH PLOVER is only met with in England during the periods of its migrations in spring and autumn. It has not been recorded from Scotland, and is a very rare straggler to both Wales and Ireland.

LITTLE RINGED PLOVER

Similar in plumage to the RINGED PLOVER, but is considerably smaller (being nearly a quarter less in weight), and has the shaft of the outer flight-feather only of each wing *white*. The legs and toes *pale brown*.

A *very rare* wanderer to the British Islands from the continent of Europe. It is also an inhabitant of Asia and Northern Africa.

KILDEER PLOVER

Two occurrences only in the British Islands (Hampshire, 1857; Scilly Isles, 1885). A North American bird.

CASPIAN PLOVER

One occurrence only in the British Islands (Norfolk, 1890). A Western Asiatic species which winters in Africa as far south as the Cape.

THE LESSER GOLDEN PLOVER

Slightly smaller than the GOLDEN PLOVER, but resembles the latter in appearance.

One of the distinctions between the LESSER GOLDEN PLOVER and the GOLDEN PLOVER is that the former, at all seasons of the year, has the tuft of narrow feathers on each side under the wings *grey*—these feathers in the COMMON GOLDEN PLOVER being *white*, and in the GREY PLOVER *black*. There are two races of this bird, both of which have been obtained two or three times in the British Islands; the one inhabits Eastern Asia, while the other is American.

SOCIABLE PLOVER

One occurrence only in the British Islands (Lancashire, 1860). A Western Asiatic and North-Eastern African species.

These last five Plovers have, of course, never been known to nest with us.

LETTER XXV

TURNSTONE, OYSTER-CATCHER, AVOCET, BLACK-WINGED STILT, AND PHALAROPES

THE TURNSTONE

Local names.—STONE-TURNER, STONE-PICKER. (Both names derived from the bird's habit of turning over stones in search of food.)

Length.—9 to 9½ inches.

Weight.—5¼ oz. to 5¾ oz. (a very fine one, 6 oz.)

Markings.—The adult male and female, in summer, have the head, neck, shoulders, and breast, marked with *black* and *white* (as shown in the right-hand figure on the next page). The back and wings boldly variegated with *black* and *chestnut*. The *lower* part of the back *white*, crossed with a bar of *black*. All the under-parts below the breast *white*.

The bill is *black*, strong, straight, and ⅞ in. long.

The legs and feet *orange-red*. A hind toe.

In winter, the plumage differs in having a mere trace of *chestnut* on the back and wings, which, with the neck and sides of the breast, are then *blackish-brown*, their feathers edged with *greyish-white*. The head and cheeks *greyish-brown*, slightly streaked with

(Winter) TURNSTONES (Summer)

black. The chin and throat *white*. The young birds greatly resemble the adult in winter dress.

Nests.—The TURNSTONE breeds in Iceland and Greenland; on the coasts of Norway, Sweden, and

Denmark; on the shores of the Baltic; and in the Arctic regions of Europe, Asia, and America. The nest is placed on the ground in the vicinity of the sea. It is but a scraping slightly lined with dry herbage. The eggs are four in number and somewhat resemble those of the Common Snipe, but are stouter and of a *greenish* ground-colour.

The Turnstone may be seen on our coasts in fair numbers from the beginning of September to the end of October, when the majority pass on southward to winter, and again in May, when they are voyaging to their nesting quarters north of us.

Turnstones are, however, not uncommon along the rocky portions of our coast during the winter. On the southern and western sea-board of Ireland they are generally distributed, and are, indeed, almost numerous in some districts from autumn to spring.

I have little doubt that Turnstones breed in Ireland, as I have met with pairs of these birds flitting about the shores of that country in June, though, after much patient endeavour, I have not found the semblance of a nest. It is also possible that the Turnstone nests occasionally on the islands of the north of Scotland.

Turnstones may be observed in autumn and spring in parties of ten to twenty on the ooze-banks of, and on the marshes near, the tide; but in winter

more commonly as single birds, or in twos and threes, on the rocks and shingle that margin the sea.

I have frequently been interested in watching TURNSTONES striving to upset pebbles almost as large as themselves, in anticipation of finding small marine animals underneath, a pair of birds often assisting each other to raise the same stone, their bills being inserted under one side of it just as levers are applied by quarrymen when moving a heavy slab of rock. At other times TURNSTONES run quickly over the shore, tossing aside every little piece of weed or loose matter they encounter, and which they consider likely to harbour the small crustaceans they feed on.

THE OYSTER CATCHER

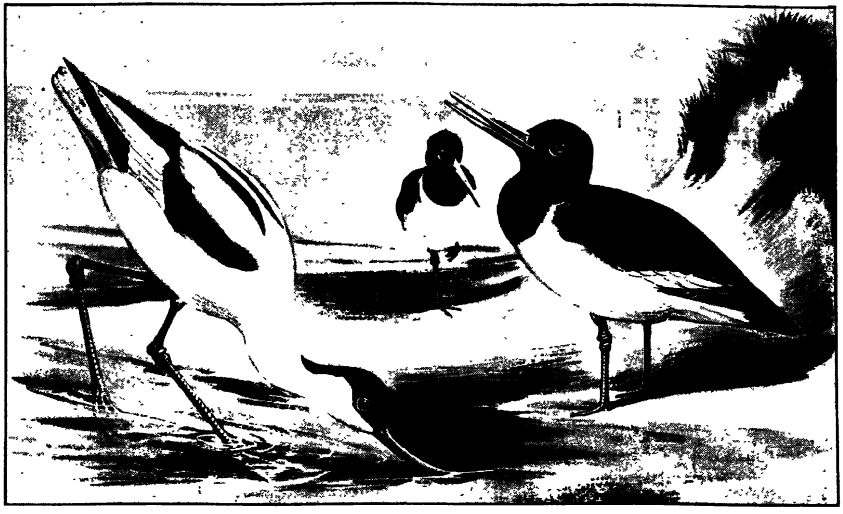
Local names.—OLIVE, SEAPIE, MUSSEL-PICKER.

Length. –16 to 16½ inches.

Weight.– 18 oz. to 22 oz.

Markings.—The plumage of the adult male and female, in summer and winter, is *black* and *white*.

The bill long, compressed laterally, and strong, but quite incapable of opening an oyster; *reddish-*



AVOCET

OYSTER-CATCHERS
(Summer plumage)

orange at the base to *yellowish* at the end. The legs *reddish-pink*; the eyes *crimson*. No hind toe.

In summer, as shown in the illustration opposite, the neck is entirely *black*.

In winter, the neck is *white* on the front and sides.

Nests.—Sparingly on the coasts of England, Ireland, and Wales (generally on shingle just above high-water mark). Freely on the shores of the mainland and islands of Scotland.

I have also seen many pairs of these birds nesting on the smooth pebbly margins of the Spey and other rapid rivers in Eastern Scotland, as well as (though in smaller numbers) round the edges of some of the inland lochs.

Abroad, the Oyster Catcher nests in Iceland; on the coasts of Western Europe and the Mediterranean; and on many of the large rivers of the continent. It also summers in the temperate regions of Asia.

The nest is a scraping in sand or pebbles, and is margined with shells or small stones; sometimes a hollow in a rock is chosen. The eggs are usually three in number, of a deep *buff* colour, scribbled and spotted with *grey*, *brown*, and *black*.

The Oyster Catcher is common to our shallow coasts in autumn and winter, especially in Ireland and

Scotland, where I have observed many hundreds in a gathering. It is a handsome bird, but worthless for the table.

THE AVOCET

Local name.—Occurs too seldom in our Islands to have a local name, but was formerly known as the 'Cobbler's Awl,' from the shape of its bill..

Length.—17 to 18 inches.

Weight.—14 oz. to 16 oz.

Markings.—The plumage of the adult male and female, in summer and winter, is *black* and *white*, the latter colour greatly predominating.

The very long *flat* bill is turned *upwards* in a curve (as much as the bill of a CURLEW is turned downwards).

The feet *webbed* like a duck's, but with the toes projecting, owing to the scalloping of the webbing which connects them. Legs and feet *bluish-grey*. The bill *black*; the eyes *brown*. A hind toe.

With the aid of the illustration facing previous page, you could not possibly mistake this bird, its peculiar bill being alone sufficient to identify it.

Nests.—The Avocet formerly nested in the east of England, to which it was a summer visitor; its scarcity as a British bird dating from the commencement of the present century.

Abroad, the Avocet breeds sparingly in Holland, Denmark, and North Germany; more freely in the south of France and Spain; and in South Russia in the vicinity of the Black and Caspian Seas. It also breeds in Turkestan, Palestine, Persia, Mongolia, and the south-west of Siberia; and is said to nest abundantly in parts of Northern Africa. The eggs, which are always deposited near water, are sometimes laid on dry mud, at other times in nests formed of withered grasses. The eggs are deep *buff*, spotted and streaked with *black*, and three or four in number.

On the coast of Schleswig-Holstein, in autumn, I have seen hundreds of Avocets *swimming* together near the shores of shallow estuaries, their webbed feet enabling them to do this with ease.

I have often watched Avocets feeding. They do not push their bills continually forward like a Shoveller Duck, or downwards like a Curlew, but always move them from side to side, as a scythe is used. The *flat* formation of the *edges* of the bill and its recurving shape allow it to sweep over the level surface of the mud.

The food is taken in where the *bend* of the bill

touches the ground, and consists of crustaceans, worms, and insects.

The AVOCET is now a *rare* wanderer in spring and autumn to the British Islands, chiefly, as might be expected, to our eastern coasts.

THE BLACK-WINGED STILT

Is a *very rare* straggler to the British Islands, and much more infrequent than the AVOCET, which, though smaller, it somewhat resembles in its *black* and *white* plumage. The BLACK-WINGED STILT may, however, at once be known from the AVOCET, and all other British and European birds, by the extraordinary length of its *pink* legs. The bill is *straight*, the feet are very slightly webbed, the eyes are *crimson*, and the back and wings are entirely *black*.

The BLACK-WINGED STILT has been recorded in our Islands on from fifty to sixty occasions, usually in spring and summer.

This bird nests in the south of France and Spain; in Sicily and Hungary; round the shores of the Caspian and Black Seas; in parts of North Africa; and abundantly in Northern India and Ceylon. In its nesting habits it much resembles the AVOCET, and its eggs are also similar but smaller.

THE GREY PHALAROPE

Length.—8 to 8¼ inches.

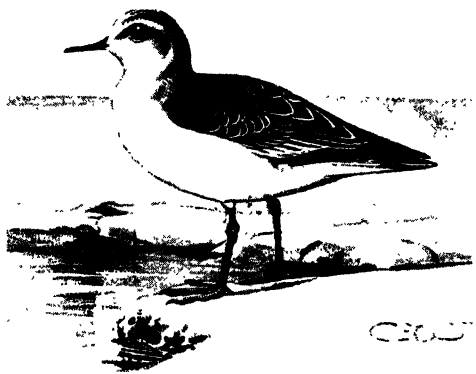
Weight.—1¾ oz. to 2 oz.

Markings.—The adult male and female, in winter, have the top of the head and the forehead *white*, and a dusky *black* streak behind each eye and another on the back of the head. The hind-neck, back, and wings, chiefly *pearl grey*. The smaller wing-feathers a deeper *grey*, and edged with *white*. The long feathers of the wings *black*, those of the tail *brown* and *grey* margined with *white*. The entire under-parts *white*. The bill *black*.

In summer, the sides of the neck, and all the under-parts from *below* the chin to the tail, are *reddish-chestnut*. The chin, forehead, and top of the head, *blackish*. A large *white* patch round each eye. The back *black* to *slate grey*, each feather broadly bordered with *chestnut*. The wings and the tail *blackish-grey*, some of the smaller wing-feathers being margined with *white*. The bill *yellow* at the base to *black* at the end.

The feet of this bird are *yellow*, and have a series of *lobes* on the toes, which, though much smaller, are precisely like those on the toes of the COOT (compare pp. 241, 307).

Nests.—In Iceland, Greenland, Spitzbergen, and the Arctic regions of Asia and America. The nest is placed on the ground in a moist situation, and near water. The eggs are four in number, and *greenish-buff* marked with *dark brown*.



The GREY PHALAROPE occasionally visits the shores of Great Britain during autumn in considerable numbers, but in most years it is a scarce species, and to Ireland it is always a rare straggler.

I have on several occasions seen the GREY PHALA-

ROPE within an oar's length of me, swimming tamely about on tidal rivers and creeks, and presenting the appearance of a miniature SEAGULL floating lightly on the surface. If alarmed a PHALAROPE will often run in paddling fashion along smooth water rather than fly, and then settle again at a safe distance; the motions of its feet and wings, as it thus progresses, resembling those of a COOT, WATERHEN, or DABCHICK, when these birds at first rise on wing.

In some seasons I have met with a good many GREY PHALAROPES in September and October, then perhaps none for two or three years.

There is no mistaking a PHALAROPE, as its small size and tiny *lobe-webbed* toes at once betray its identity * (p. 307).

THE RED-NECKED PHALAROPE

Length.—7 to 7¾ inches.

Weight.—1½ oz. to 1¾ oz.

Markings.—This bird is a good deal smaller than

* A great visitation of the Grey Phalarope occurred on the southern and eastern coasts of England in the autumn of 1892. The Grey Phalarope seldom appears as a chance straggler; if it comes at all, it usually visits us in a flight that is observed only on some particular part of our coast, as, for instance, the irruption of these birds on the western sea-board of Scotland in October 1891.

the GREY PHALAROPE, and its bill is slightly *longer*, much more *slender*, and *tapered*; the bill of the preceding bird being *broad* and *flat* in comparison with its length.

In summer, the adult male and female have the chin and throat *white*; the upper part of the breast, and the centre of the neck, *dark grey*. The lower breast, the abdomen, and under the tail, *white*. A *chestnut red* patch on the front and on each side of the neck. The head, hind-neck, and upper plumage, *slate grey*; some of the feathers of the back edged with *chestnut*, which chiefly form two narrow lines of that colour on either side of its middle portion. The wings with a *white* band across the centre.

(In the GREY PHALAROPE *all* the under-parts, from just below the chin to the tail, are *chestnut red* in summer.)

In winter, the *red* on the neck is absent, and the *chestnut* on the margins of the feathers of the dark-coloured back is replaced by *white*. Its inferior size and the fineness of its bill distinguish this bird from the GREY PHALAROPE at any season.

The toes are *lobe-webbed* as in the GREY PHALAROPE.* (See opposite page.)

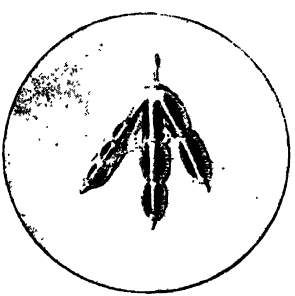
Nests.—Very sparingly in the islands of the north and west of Scotland.

* The males of both the Phalaropes are duller in plumage than the females, and share with the Dotterel this singular peculiarity among British Birds. The males are also slightly smaller than the females.

Abroad, the RED-NECKED PHALAROPE breeds in the Faröes, Iceland, and Greenland; the north of Sweden and Norway; in Novaya-Zemlya; in Arctic Siberia; and very freely in Arctic America.

The nest is placed amid a tuft of grass growing in or near fresh-water. The eggs are of a *greenish-grey* ground-colour spotted with *brownish-black*, and are four in number.

Though a few pairs of the RED-NECKED PHALAROPE nest in the Orkneys, Shetlands, and Hebrides, to which



FOOT OF THE GREY PHALAROPE

they are summer visitors, it is, however, an uncommon bird in our Islands, and has only once been recorded from Ireland.

It never appears in flights, like the GREY PHALAROPE, and with the exception of the few that nest in

the North of Scotland, is merely an occasional migrant, chiefly observed on our eastern sea-board in the autumn.

It is somewhat strange that the RED-NECKED PHALAROPE, as it travels to or from its summer quarters in Arctic regions, should so seldom be observed on the coasts of the British Islands, especially as it breeds in many districts also selected for nesting in by our far more frequent visitor, the GREY PHALAROPE.

WOODCOCK

LETTER XXVI

THE WOODCOCK

Local names.—None that I have heard of.

Markings.—Too well known to need description, Mr. Whymper's drawing opposite being quite sufficient in this respect.

Note.—There is *no* difference between the plumage of the male and female Woodcock, though it is often imagined a variation exists in the coloration of the sexes.

Weight.—The *average* weight of a well-conditioned adult male or female Woodcock is from 12½ oz. to 12¾ oz. A large bird will weigh from 13 oz. to 14 oz., a very fine one from 14 oz. to 15 oz., a quite exceptional one from 15 oz. to 16 oz., and a small one 11 oz. to 11½ oz.

During the wonderful visitation of Woodcock to the west coast of Ireland in the severe January of 1881, I carefully weighed several hundred of the finest specimens I could select. Three of these scaled 16 oz. each, and I obtained one of 18¼ oz., which much

excelled in size and weight any bird of its kind I ever saw before or since.*

There is no doubt the *hour* at which a WOODCOCK is killed affects its weight to some extent, for the digestion of this bird is extremely rapid, and a WOODCOCK shot at mid-day will weigh an ounce less than one obtained at daybreak, just after it has returned from its feeding grounds with a well-filled stomach.

THE NESTING OF WOODCOCK

WOODCOCK nest freely in many parts of the British Islands. There is hardly a parish in the kingdom, containing suitable cover, that these birds do not breed in. The counties that border the Eng-

* I am of opinion that the Woodcock and Snipe of the west of Ireland, owing to the mild humid climate and the unlimited supply of food, are generally larger and handsomer birds than those of England, Scotland, or Wales. I also consider that when Woodcock are starved out of their usual resorts by severe weather, they feed so greedily on first visiting the soft ground near the coast, that for a few days they considerably exceed their ordinary weight. For the same reason Woodcock and Snipe are never so fat and heavy as at the end of the first week of a sudden thaw that comes after a long spell of snow and ice.

The very large Woodcock of 18¼ oz. was brought to my notice by a game-dealer (who had over two thousand Woodcock through his hands in one month), as a result of my offering a reward for a bird that scaled 17 oz., and this one I cut open to make sure its weight was an *honest* one. Mr. W. H. St. Quintin, of Scampston Hall, East Yorkshire, has a Woodcock preserved that weighed 16 oz. It was killed at Scampston by flying against an iron fence close to the house.

lish Channel are specially favoured by Woodcock for nesting, and the numbers that breed in Sussex alone are to be computed at hundreds. On one estate that I am acquainted with in the county named, fifty to sixty couple of Woodcock are *known* to nest annually, and there are probably many others on the same property that escape notice.

The continual formation of young woods in our Islands in the interests of game, and their freedom from disturbance in spring, summer, and autumn, and to a great extent in winter, has, even in recent years, added a vast amount of covert wherein the Woodcock can find safety from persecution, and a quiet retreat for rearing its young.

As Pheasants are now so generally preserved, the woods are often undisturbed by man or dog from one year's end to another, save on the two or three occasions in winter when they are beaten through for sporting purposes; hence Woodcock are encouraged to nest in a plenitude that far exceeds what was the case before the artificial production of game was so prevalent.

It is not very many years since the discovery of a Woodcock's nest was considered worthy of record in the sporting journals, and even now few people are aware how abundantly these birds breed with us, chiefly because they do so in situations that are jealously protected from trespass.

The Woodcock is an early breeder, the eggs being sometimes laid by the beginning of March, though a month later is the usual date for incubation to commence. The nest is merely a slight hollow in the ground, lined with dead leaves, and is situated in a sheltered spot, usually in a wood, but is not hidden among herbage. The eggs are three or four in number, and are of a *yellowish-white* ground-colour, blotched with *reddish-brown* and *grey*.*

Woodcock breed throughout the entire wooded regions of Northern Europe and Asia, and in the autumn many of these birds migrate for the winter as far south as Northern Africa, Persia, the Indian Peninsula (occasionally to Ceylon), and Southern China. In the temperate regions of the Old World, from Britain to Japan, the Woodcock is represented both in winter and summer; while in the woods that clothe the mountains of the Azores, Canaries, and Madeira, it finds congenial haunts throughout the year. As a straggler our Woodcock has several times occurred on the shores of Eastern North America.

* Many of our modern Ornithological Authors allude to the Woodcock as nesting 'sparingly' in the British Islands, as if the bird was a 'rare' rather than, as it is, a 'fairly common' breeder in most parts of Great Britain and Ireland. The Woodcock has even been found nesting on bare open ground in the islands of the Shetlands and Hebrides.

The Migration of Woodcock

The earliest flights of Woodcock usually arrive on our eastern coasts between the 10th and 20th of October; a few birds may come during the first week of that month, but these are only the advance guard of the main body.

Taking one year with another, the majority of the Woodcock that form the autumn immigrants reach our Islands by the end of October, though up to near the end of the third week of November fresh arrivals appear in varying numbers according to the season.

There is no doubt the climate abroad greatly influences the date of the appearance of our Woodcock. If, for instance, wintry weather commences early in the north and centre of Norway and Sweden, then the birds come in two or three great flights about the third week of October; but if the late autumn is mild in Northern Europe, they cross the North Sea in detachments from the 20th of October to as late as the 25th of November.

The wind has also a good deal of influence on the migration of Woodcock. Should we have light easterly, especially south-easterly, breezes during the second and third week of October, these are sure to bring us flights of Woodcock. If the wind is persistently strong from any other direction, including the north, the birds will not be seen in any number in the British Isles till wintry conditions in more northern

regions compel their migration southward by depriving them of their food, an occurrence that is rarely later than the 20th to the 25th of November.*

As to the moon assisting Woodcock in their migration, I do not credit it; the birds fly, I believe, by instinct and not by vision. As a proof of this, I have known migratory Woodcock appear more numerously after dark wet nights in certain favourite coverts inland than after bright and fine ones, the wind being equally favourable in both cases.

When Woodcock arrive from abroad on the east coast of England and Scotland in autumn, they are often so exhausted that they pitch along the sea-shore, frequently on the verge of the cliffs and rocks. At such times I have almost trodden on Woodcock when they were sleeping amid the bent grass on sand-hills that border the tide. As soon as the birds have rested for the day they fly the same evening inland, some to seek for the food that is not available on the bare ground where they first alighted after their

* I question if a single Woodcock arrives in the British Islands from abroad after the 10th or 12th of December, as even *before* that date the birds are usually *forced* to migrate southward to avoid the starvation that ice and snow would entail if they remained in the north of Europe.

There can be no doubt that many Woodcock perish during a rough passage across the North Sea. A few years since a large cod-fish was captured at Spurn (the day after a great flight of these birds had arrived on the Yorkshire coast), which contained an entire Woodcock in its stomach.

long journey, while others pass onwards to their accustomed winter quarters in or beyond our Islands. Having thus dispersed, they do not revisit the coast till they are on their voyage northward in March, or are driven to seek the softer climate of the seaboard in winter through frost and snow in the inland districts.

I have noticed that when Woodcock reach our eastern shores during the night of an easterly gale they invariably land in a tired condition, the effect of a rough passage. This is shown by their alighting in such weather *close* to the *sea-shore*, and being so tame the day subsequent to their arrival that they may be almost taken up by the hand as they indulge in the sound sleep necessary to recruit their strength before they proceed any further.

If, however, the wind is *light* from the east, or even blowing *gently* from an adverse direction, or if there is no wind, Woodcock do not pitch on the coast after crossing the North Sea, but fly on direct to their inland haunts, and should a few stragglers be found near the shore, they are lively and shy, and will not suffer a too near approach by the shooter.*

I cannot recollect ever having seen a Woodcock in poor condition on its arrival in October on our east coast.

* The wind most favourable for the migration of Woodcock to our shores is always a *light* one. I do not, however, consider the passage of birds is much *aided* by the wind, certainly not by a gale astern, and I doubt if a beam wind would help them if it were strong.

If we have a mild December a proportion of the WOODCOCK that come to us in the autumn and early winter remain during that month in favoured resorts in England, Scotland, and Wales, but the majority are constantly pushing their way south and west; many of the birds that voyage southward no doubt crossing the English Channel, and those that tend to the west wintering in Ireland.

If hard frost occurs in Ireland, WOODCOCK at once appear in the neighbourhood of the Atlantic.* Should severe weather happen in Scotland, they visit in considerable numbers many of the islands on the west coast of that country to seek the food denied them by ice and snow on the mainland, but which is usually at their disposal in plenty under the softer temperature that prevails near the Atlantic Ocean.

When WOODCOCK, by reason of hard weather, are driven in large numbers from their rural haunts to the western shores of Ireland and Scotland, there they remain till a thaw sets in, for 3,000 miles of ocean naturally prevents their further progress westward.

Though there are always a fair number of WOODCOCK in the east of England and Scotland in winter, yet, as I have said, the bulk of the birds that come

* I once, during severe frost, fired my stanchion-gun at a number of Waders that were collected on a sand-bank off the west coast of Ireland; among other birds killed by this one shot I picked up seven Woodcock.

to us from the north of Europe in autumn journey south and west. What the WOODCOCK seeks when he visits our Islands is *food* and *warmth*, and he will travel till he finds a district that suits him, and when settled therein he will locally shift his quarters as the weather affects his feeding grounds.*

* The WOODCOCK that breed with us all seem to move southward in the early autumn. I know woods in England and Scotland, that contain numbers of Woodcock, old and young, in August, yet all these birds vanish by the end of the first week of September, and none are to be seen on the wing at dusk (a *sure* sign they are absent), or in the coverts, till the usual flights arrive from abroad in October.

I believe we kill only a *very* small percentage of the thousands of Woodcock that annually nest with us, for nearly all these birds, with their broods, escape the gun by leaving, presumably for southern countries, ere covert shooting commences.

Before the preservation of Pheasants became so universal, a sportsman continually harassed his woods for what he could find, but in these days the only chance we have of killing Woodcock in game coverts is on beating them for Pheasants when if the 'cock' happen to be present they are shot, and if they are absent they are not, as a rule, especially sought for on another occasion.

Of course there are some famous coverts, particularly in the south and west of Ireland, that are beaten for the Woodcock they are *known* to contain in the autumn and winter, but these are exceptions, and seldom hold much game, for Woodcock are not usually to be found in *numbers* in *winter* where Pheasants are numerous. This is not I consider because Woodcock dislike the association of Pheasants, but rather because both birds by nature seek different localities for feeding and sleeping in. The Woodcock fancies a wood with *short* or else *scattered* trees (that do not impede his 'flighting' at dusk and dawn), and dense brambles and shrubs he can sleep snugly in by day. The Pheasant is fond of a *close* timbered covert with *tall* trees (so that he can roost in safety and shelter), and bare ground under the trees on which he can strut about and scratch for food. The Pheasant thrives in a dry grain-growing district, and the Woodcock prefers one that is wet and untilled.

Woodcock as they migrate overland in autumn often do so in parties. I have several times flushed eight to a dozen 'cock' on the moors, within a distance of a score yards of each other. On one occasion, as I was passing at daybreak over a lonely tract of very high land in the west of England, I came upon at least twenty Woodcock which rose all round me out of some wet peat cuttings wherein they had probably alighted during the past night with the intention of resting and feeding ere they continued their flight the ensuing evening.

When migratory Woodcock leave us in March to return to where they nest in Northern Europe, they fly in couples, and I have often seen them about the sand-hills of the sea-shore previous to their departure. The birds that remain to breed with us shun the coast and its boisterous winds, and select sheltered positions inland to nest in.

How Woodcock Feed and Where to Find them

The Woodcock is by nature a bird that feeds entirely by night, and rests by day.

Woodcock, in ordinary weather, leave at twilight the spots they hide in from dawn to dusk, and fly to their feeding grounds, whereon they remain till daybreak, when they again seek dry situations for sleeping in till the next evening.

Woodcock as they travel at night to the places where they seek for food, flit out of the coverts like owls, and nearly always by the same openings among the trees. If you can discover these outlets, as I often have done, you may shoot the birds as they emerge at dusk from the woods.

It is commonly supposed that wintry weather in December and January brings us flights of Woodcock from abroad, because in frost and snow the birds appear suddenly and in unusual numbers in woods that lie near the coast. These birds have in reality merely collected from many miles round to the milder neighbourhood of the tide, and have *not* flown from Northern Europe, where, owing to climatic conditions, they could not exist, and none are in consequence left to migrate.

In *severe* weather, when the open ground they commonly visit for obtaining food by night is hard frozen, Woodcock feed by day in the woods, to which they also gather for warmth from any exposed places they have been in the habit of sleeping in previous to the advent of ice and snow.

As Woodcock then feed and rest in the *same* quarter they are very numerous in certain districts, and often suggest the erroneous idea, even in January, that a 'flight' of cock have arrived 'from foreign parts.'

In frost and snow you will find WOODCOCK in *large* plantations that consist of well grown firs and hard-wood trees, and which have warm corners with evergreen shrubs and brambles.

The firs protect the soil and the little open drains from frost, and the birds are thus enabled to probe for food, and to obtain what is as necessary to them as food, *water*. The oaks, ashes, and other deciduous trees supply them with an abundance of loose decayed leaves under which they find worms and insects, and the shrubs and brambles afford a dry covering to sleep beneath.

Even in mild weather, a plantation composed entirely of firs is never so frequented by WOODCOCK in mid-winter as one containing trees that shed their leaves intermixed with the spruce and pine. WOODCOCK at all times in winter favour woods that face *south*, particularly if these contain *open spaces* in which, after rain and snow, the birds can dry their plumage and sun themselves should a brief chance occur.*

* The Woodcock that reach us from abroad in October and November may, for a *few* days after their arrival, be found scattered over the country in all kinds of odd places, from a solitary tuft of grass in the centre of a bare meadow, to a field of turnips, or the cabbages of a cottage garden, but the birds of the 'flight' that decide to remain in the district soon resort to better shelter by day, especially if windy and wet weather prevail.

The *first* arrivals come before we have frost and snow, and during the months of October and November are very fond of sleeping in *young* larch woods of some ten to twelve years' growth, as they can easily see to fly in and out of these at dawn and dusk to

When Woodcock are compelled by exceptionally hard weather to feed in the coverts they are always wild. They are not then sleeping by day, as is their custom at other times, but are precious wide-awake as they run about in search of the food they are unable to obtain by night on the frozen fields and marshes, and which, save in moonlight, they cannot well see to probe for under the trees of a wood after dusk.

Directly the thaw commences Woodcock desert the older and more extensive woods, and the vicinity of the coast, to return to their former resorts; they are then to be found again, here and there, scattered over a wide extent of country. The covert is beaten that held so many a day or two previous, scarce a Woodcock is to be seen, and remark is apt to be made that 'the flight which came from Norway has left us.' *

their feeding grounds. As these woods are chiefly formed for game, and till a good deal older are of little value, they are seldom disturbed by shooting or thinning, and are a grand refuge for *migratory* Woodcock in the autumn. It is scarcely worth while to fell even our full-grown larch and fir when we can purchase it of a better quality, all ready sawn up for use, at a less cost from abroad than we can produce it at home. Trees are now planted chiefly for ornament, or as a harbour for Pheasants, and are no longer regarded 'as excrescences grown by nature on the face of the earth as a means of paying man's debts.'

Directly hard frost occurs, Woodcock desert the young plantations, especially those on high ground, for the older and more open ones that contain hard-wood trees, such as oak, ash, and beech, as well as firs, and in which, if well sheltered from the wind, they then both sleep *and* feed, as described.

* Remember that Woodcock very soon leave a plantation for rough cover *outside* when the trees commence to *drip* ice-cold water, through the thaw melting the snow lodged on the branches.

In *mild* weather WOODCOCK will have fed to repletion before daylight, and they are *then* likely to sit close, especially in the forenoon, for they are sleeping and resting under the influence of digestion and their exertions in seeking sustenance the previous night.

When there is no frost or snow the nature of WOODCOCK is to feed in every marsh, moss, spring, or ditch throughout the country; to sleep by day in small woods, among groups of low trees, amid briars and fern, and often in the hedge bottoms; and to select dry snug spots for resting in that are within a *short* distance of where they feed at night.

The state of the moon has, I have always found, a good deal of influence on the wildness or the reverse of WOODCOCK. If the moon is bright the birds can find their food with ease (unless the ground is under ice and snow); for though WOODCOCK chiefly exist by probing with their bills for whatever they can discover by a sense of touch below the soil (*never* by *suction*, as is sometimes imagined), they also subsist on worms, which they seek by eyesight, and if the night is clear they are able to select the choicest spots for feeding in.

On a dark night WOODCOCK are unable to procure their food so readily; they are not, therefore, in such a satiated and lazy condition the following day, but are much more alert than they are after a fine light night, during which they have been able to feed to their fancy.

I have constantly observed this, and had I a number of Woodcock in a covert I would certainly in *winter* attack the birds after a bright night, if one came within two or three days; longer it would not be wise to wait, as Woodcock are such restless visitors. In October and November, if Woodcock have arrived, I advise you to shoot them without an hour's delay, as at that time of year they are on the move southward or westward, and though a covert may hold a score birds on Monday, not one may be seen if you beat it on Tuesday.*

* Woodcock on their first arrival from abroad with a strong on-shore wind sometimes alight in the hedges near our east coast, and there is often on such occasions a grand onslaught made by everyone in the neighbourhood who owns a gun.

The novice will race up and down every hedge in the district, but the old hands spare their wind, and only beat the *leeside* of the hedges that *face*, that is to say are *parallel* to, the sea-shore; for under these the birds obtain the best *shelter*, and are hence most likely to be *found*.

Note.– Before shooting game on the wing was practised, Woodcock were taken in nets; both by day and as they emerged from the woods at twilight to feed.

At Glynllivon, North Wales (the fine sporting estate of my friend the Hon. Frederick Wynn), there is a small open space, known as 'Woodcock Hill,' in an old plantation in the park. The open space is as the axle of a cartwheel, and from it radiate (like the spokes of a wheel) long straight glades through the trees. Formerly this opening was encompassed by fine nets suspended between tall poles. When the 'Cock' were driven, by a number of men, inwards from the outskirts of the wood, they flew up the glades, each of which converged at the net-surrounded central space. At this spot the birds were meshed by reason of their flight from all parts of the covert being suddenly intercepted by the hanging nets.

LETTER XXVII

HOW TO SHOOT WOODCOCK

IF you are looking for Woodcock in a plantation that has a thick patch of shrubs or undergrowth which you know the birds are wont to take refuge in, always try such a spot *first*, then beat the less overgrown portions of the covert next, and walk *again* later on through the warm shelter you primarily searched. You may then not only find birds in this favourite resort on *first* trying it, but you are likely to drive, as you hunt the main part of the wood, other birds that you flush and do not kill, to the same quarter in readiness for your *second* visit to it.

If, on the other hand, when beating a covert, you leave the thickest part to finish with, the latter may hold two or three couple of birds that you have driven to seek its retirement, in addition to those that were originally ensconced therein. From this retreat they may then rise so quickly one after the other, that you may only bag one or two of them.

Should you be beating a plantation of *closely* growing dark trees, as firs, let your man and his dog, or any assistants you employ, traverse the thickets, and walk down a glade yourself. If this is not possible, stand forward from time to time in a clear space, as a Woodcock is *sure* to cross the openings in a wood when flushed in a dense portion of it, and a *long* shot at a Woodcock flying where timber is *not* too luxuriant is better than *three* near shots in close covert.

The usual method of shooting Woodcock is for five or six sportsmen to surround the outside of one end of a covert; the beaters are started at its other extremity, and as they march towards the shooters they send some, probably not half, of the birds forward to the guns. Then a second wood is driven, and so on throughout the day. The result is the bag of Woodcock is not *near* what it might have been with proper management, for a considerable number of the birds flushed by the keepers and their men turn back, and are not even *seen* by the shooters.

Woodcock *cannot* be driven *out* of a wood in any required direction like Pheasants, as they are always loth to quit the shelter they rest in by day; it is not their nature to leave it for the open unless harassed beyond endurance, and they then probably fly in all quarters but the one desired.

If you wish to show sport to a number of friends,

do not attempt to force the Woodcock *out* of a covert, but, provided the shooters are *careful* marksmen, position them *inside* the wood in rides, and open spaces, in a line *across* its *centre*.

Direct the beaters to walk leisurely, and in *silence*, from one end of the covert towards and right up to the line of guns. Then let your men go round, well *clear* of the wood, and drive its other half, from an opposite direction, to the shooters; the latter, of course, having faced about, but otherwise held their ground.

This is the *only* successful plan of killing a *satisfactory* bag of Woodcock with *several* guns, for by making two or three drives each way, you have a chance at *all* the birds sooner or later; those that come forward and those that turn back.

If the covert is too large for the shooters to extend in line from one side to the other, take the one half first and the other afterwards, the guns standing and the beaters walking up to them as described—tactics that may be repeated so long as any Woodcock are left to fire at.*

* When it is thought all the Woodcock in a covert are killed that *can* be, and those that flew away cannot be found, just take a stroll with your gun and (accompanied by one man with a stake) beat the boundary hedge of the wood, if it has one. You will, as a result, probably flush one by one the very birds that were previously seen, or rather *said* to have been seen 'flying away for miles.' Unless you walk a wood yourself on its first being driven, it is always difficult to obtain a *reliable* account from keepers of how many Woodcock it contained. Keepers take little interest in Woodcock in a game locality, simply because these birds are mere casual

Previous to working a wood in this fashion, station three or four sharp-eyed men (who are capable of telling whether a Woodcock merely *lowers* its flight or *pitches*) here and there round the wood and a hundred yards or more from it. These men can mark if any birds slip out of covert and drop in the hedges or other shelter in the open, so that if they do you may presently follow them up.

If a Woodcock is *accurately* marked down, let us say in a hedge, or in a cluster of furze, or bracken, or willows, or among a small group of trees, you can very often obtain a shot *if* you set about doing this in the right way.

To bag a Woodcock that has been seen to alight in the open, approach the spot from behind any small bush or tree that is available for concealment, and stand motionless a hundred yards from the supposed whereabouts of the bird with the wind blowing straight *from* you *towards* its hiding-place. Next send the man who marked it to walk slowly from some distance *against* the wind towards the Woodcock. It is ten to one the bird, as it rises, will fly within range of your gun, as it is sure to *head* the wind for the commencement of its flight, and to avoid

visitors and are not the outcome of personal trouble and skill like Pheasants. A long row of dead Pheasants laid out on the ground is very naturally a far greater source of pride to the keeper who has produced and guarded them, than the dozen or so Woodcock the true sportsman delights in bagging.

the person who flushed it; under these conditions you have a good chance of scoring a kill.

The perfection of WOODCOCK shooting is when *one* friend, who is quick and safe with his gun, and yourself, can beat coverts that are *not* too closely timbered for proper aiming. Your attendants being merely a man to walk between you, and a Spaniel that will bustle into every bush and briar, and *never* exceed a distance of about twenty paces from the front of your advancing line as he crosses it from flank to flank.

The three of you can then step slowly forward a score yards apart, and leave not one square yard of likely ground unsought. This is the way to kill WOODCOCK with *pleasure* and *success*, since you not only have every opportunity of *finding* the birds, but also of *shooting* them; for when walking up WOODCOCK in *this* style, you can fire at them in any direction, and the accident that is possible when a foolish sportsman fires at a WOODCOCK flying back over a number of shooters and beaters cannot happen.

If you are *walking* up WOODCOCK in covert take a rising bird the *instant* it *clears* the *ground* (you will not flush one in a hundred so near that you are liable to spoil it for the table), you may then possibly obtain a *second* shot within reasonable range should you fail with your *first*.

If you delay firing at a Woodcock in the hope of its affording an easier mark as it crosses some opening between the trees *you* conjecture it will pass, 'tis odds the bird whisks just the *other* way; you then, perhaps, fire a long and difficult shot in a *hurry*, make a clean miss, and have no likelihood of success with your second barrel.

Should a Woodcock rise in front as you walk through a covert, and there are *no* guns standing forward, you need only think of killing the bird, for the safety of the shot is assured. If, however, there *are* other guns forward, or you form one of several sportsmen posted at the end of a wood, you have *first* to ascertain if you can fire without danger to your companions, and *afterwards* to try and down your bird; a combination that with *careful* shooters assists many a Woodcock to escape. It is better to allow every Woodcock in the country to fly past you unharmed than to risk *one* hazardous shot.

Even in these days there are fools with guns who are capable of firing at a Woodcock as it rises under your nose, and who are ready to run the risk of injuring the eyes and limbs of some person present so long as they bag, or even *try* to bag, their bird! One would imagine at times that every Woodcock seen was the last of its race on the face of the earth, to judge by the random and numerous discharges occasionally bestowed upon this by no means uncommon bird, and by the beaming face of the jealous

fellow who kills one, even though he blows it to pulp within a few yards of his gun rather than allow his best friend to have a fair shot.

In regard to the gun and charge adapted for Woodcock shooting there is little to be said. No *special* gun is necessary; you need merely carry the one that fits your eye and hand at all times (*provided* it is *not* a choke-bore), and you should load it with No. 7 shot.

What you require for killing a small bird like a Woodcock is a *cylinder* gun, throwing a *wide* pattern that allows for some inaccuracy of aim; but to make a wide pattern *effective* the charge must contain plenty of pellets, and $1\frac{1}{16}$ oz. of No. 7 shot is sufficient to cover a target of three feet square at forty yards so that a sparrow could not escape.

No. 7 shot will kill a Woodcock at fifty paces, and even when a Pheasant has come over me instead of the expected Woodcock, I have often, to my surprise, dropped it dead as a door-nail from a height I have been almost ashamed to fire at with such small shot as No. 7, lest I wounded it.

In *all* modern guns the pull of the triggers is certain to vary after a time and become *easier* to the pressure of the finger; now it is very important in

Woodcock shooting that your triggers should not be in the least too light to the touch.

Woodcock nearly always offer snap shots, and with a *light*-pulling trigger you are *very* liable to fire half a second too soon, and this may often cause you to miss your bird by shooting under it.

Light triggers are, besides, *always* risky when *quick* shots have to be fired *in covert* at birds that fly so low and erratically as Woodcock. The anxiety to take advantage of a momentary chance may sometimes induce you to press a trigger slightly harder than you intend ere the gun is properly to the shoulder, and the charge may *then* travel in an *unsafe* direction.

Not[illegible]times difficult to persuade young retrievers [illegible]dead Woodcock or Snipe off the ground; [illegible] when forced by command to do so they will often grin and lift their lips, and make a face like a child taking a dose of rhubarb.

Starve such a dog till he will munch the bones of Cock or Snipe for his dinner, and he will, for the rest of his life, never afterwards refuse to retrieve these birds when you shoot them.

In Lord Ardilaun's coverts, near Cong, in the West of Ireland, a hundred couple of Woodcock have twice been killed in one day; and at 'Muckross,' in the south-west of Ireland, 1250 were shot in one winter (1863–4), 840 birds being bagged in ten days.

LETTER XXVIII

SNIPE

WE have two kinds of SNIPE that are more or less numerous in the British Islands—the COMMON SNIPE and the JACK SNIPE, the first mentioned being to some extent resident, and the latter only a winter visitor.

We also occasionally obtain in autumn the GREAT SNIPE, and the RED-BREASTED SNIPE has occurred on a few occasions.

The bird formerly known as SABINE'S SNIPE is but a dark variety of the COMMON SNIPE.

THE COMMON SNIPE

Local names.—FULL SNIPE, WHOLE SNIPE.

Length.—10¼ to 10¾ inches.

Weight.—The average weight of an adult COMMON SNIPE, when in good condition, is 4½ oz. to 4¾ oz. A large bird will weigh 5 oz. to 5¼ oz., an exceptional one 5½ oz. to 5¾ oz.; and a small one 3¾ oz. to 4 oz. The

JACK SNIPE COMMON SNIPE GREAT SNIPE

heaviest Common Snipe of several thousand I have carefully examined scaled 6⅛ oz., and the largest I ever *heard* of weighed 6¼ oz. (see note, p. 342).

Markings.—Too well known to need description. Its superior size tells it at once from the Jack Snipe; and its smaller dimensions and the *fourteen* feathers its tail is composed of distinguish it from the Great Snipe, the latter never having less than *sixteen* tail-feathers

Nests.—The Common Snipe breeds more or less freely in most parts of the British Islands that offer suitable ground to which it can resort for food, either when nesting or afterwards with its young.

Abroad, the Common Snipe nests in Iceland; in Northern and Central Europe; and in Siberia. After the breeding season it migrates southward for the winter as far as Equatorial Africa and Asia.

The nest is small, consists of a rather deep depression in the soil or herbage, and is lined with bits of dry fern and grass. In this hollow the bird lays three to four eggs of a *greyish buff* or *pale green* ground-colour, spotted and blotched with *dark* and *pale brown* and *grey*.

The nest is often placed under the south side of an overhanging tussock of sedge, or perhaps among dwarf heather or short coarse grass.

As a SNIPE can feed in every ditch, fen, and wet meadow; and by the margin of all the springs, lakes, and rivers, it is a bird that, in limited numbers, is generally distributed in winter in all the counties of our Islands, though naturally more abundant in marshy districts of marsh and mere than elsewhere.

THE JACK SNIPE

Local name.—HALF SNIPE.

Length.—7½ to 8¼ inches.

Weight.—2¼ oz. to 2½ oz.; a *very* plump one, 2⅞ oz. to 3 oz. (The largest I ever shot scaled 3⅛ oz.) The largest I ever heard of, 3¼ oz.

Markings.—The smallness of the JACK SNIPE—it is about half the size and weight of the COMMON SNIPE—places its identity beyond doubt on any occasion, for a JACK SNIPE, however fine a bird, will always be less in size than the smallest COMMON SNIPE you are likely to shoot.*

If on killing a *young* COMMON SNIPE in the autumn you have any doubt as to its kind, remember that the JACK SNIPE has only *twelve* feathers in its tail and the

* The bill of a 'Jack' is only 1⅛ inch in length, that of the Common Snipe being 2¾ inches long.

COMMON SNIPE has *fourteen*. Another peculiarity of the JACK SNIPE is that the centre of the top of its head and forehead are a uniform shade of *dark brown*, the COMMON and the GREAT SNIPE having a *pale brown* streak dividing the crown.

Nests.—The JACK SNIPE has *never* been known to breed in the British Islands (in nearly all the reported instances the DUNLIN has been mistaken for this bird).

The fact of JACK SNIPE being now and then seen in summer is no evidence that they nest with us, for these are probably slightly wounded birds that have been unable to migrate northward in spring with the rest of their kind.

JACK SNIPE breed throughout Northern Continental Europe (chiefly north of the Arctic Circle), and in Siberia. The nest and eggs resemble those of the COMMON SNIPE, the eggs being smaller.

The JACK SNIPE, though usually to be seen during the autumn and winter in localities frequented by the COMMON SNIPE, is not nearly so numerous in our Islands as its larger relative.

If, for instance, you bring home a score of SNIPE, your bag *may* contain three or four JACK SNIPE, seldom more, and sometimes less.

JACK SNIPE are, however, very uncertain visitors.

I have often flushed a dozen, all to themselves, in some little patch of marsh land, and in a day's sport even killed as many of the smaller as of the larger kind. Then I have, perhaps, met with no JACKS where they were in plenty the day before, and in a week or two found them as numerous as ever—nearly all to vanish again as suddenly as they came, and quite possibly for the rest of the winter.

The JACK SNIPE, though so diminutive a bird, has two recommendations:—

1. It is invariably a fat and delicious morsel for the table, and I consider superior in flavour to the COMMON SNIPE.

2. It affords a young sportsman or a bad marksman good practice with the gun, for you may fire away at a JACK SNIPE and follow the bird up till it is finally killed; or, from its sitting so close in coarse herbage (as I have often seen happen), till it cannot be found either by man or dog.*

* It is not *always* the fault of the sportsman when a Jack Snipe escapes, for, however accurate the aim, so small a bird often flies unharmed between the pellets of the charge at a distance of thirty to forty yards, unless your gun is (which it should *not* be) a very close shooting one. If a 'Jack' rises at your feet and you pop off at him at about twenty yards, 'tis almost like firing a bullet at a 'bumble bee,' for it is not so *very* easy to cover his little figure with the narrow circle of shot a gun throws at short range. A few years since I deliberately fired six barrels, one after the other, at the same Jack Snipe, with a feeling on each occasion of 'I've got you now, you little rascal,' and yet I never touched a feather! I had been after grouse, and the No. 5 in my gun was, no doubt, the reason of my ill luck. Anxious for sympathy, I turned to the old Scotch keeper who was attending me,

The Jack Snipe rises without any shrill cry to startle you, and flies slower than the Common Snipe, its movements when on wing somewhat resembling those of a Dunlin or Sandpiper.* After travelling a short distance, sometimes not exceeding fifty yards, a Jack Snipe is wont to suddenly drop down head-first into cover, though this be only a solitary tuft of grass or a little bunch of rushes, out of which you can at times almost stir the bird with your gun-muzzle for another shot.

The Jack Snipe is a voracious feeder, as its habitual plumpness testifies, and this may account for its rather lazy flight, and its readiness to alight again so soon after being forced on wing.

THE GREAT OR SOLITARY SNIPE

This bird from its rarity has no local name, but is known by those sportsmen who are acquainted with it as the Double, or Woodcock Snipe.

Length.—11½ to 12 inches.

and said, 'Surely I must be a downright ass to miss six times in succession a bird getting up under my nose like that.' He drily remarked, as he took a pinch of loose snuff out of his waistcoat pocket, 'I'm joost theenken the saame.'

* It is an error to say the Jack Snipe *always* rises silently, for I have on two or three occasions *distinctly* heard this bird give vent to a low whistling call when I have flushed it *close* to me.

Weight.—9 oz. to 10 oz. (The largest I ever saw in our Islands weighed 10½ oz. and the smallest 7 oz.)

Markings.—The GREAT SNIPE in appearance is about one-half larger than the COMMON SNIPE, but a very fine COMMON SNIPE is only a couple of ounces or so less in weight than a small GREAT SNIPE.

From this possible similarity it is probable the GREAT SNIPE is sometimes overlooked, and that when a large bird is noticed among a number of autumn-killed COMMON SNIPE, and merely regarded as a fine specimen of its kind, a closer inspection might discover it was in reality the GREAT SNIPE.

The GREAT SNIPE may be recognised at any age or season by the following characteristics:—

1. It has never *less* than *sixteen* feathers in its tail, the COMMON SNIPE having only *fourteen*.

2. It has the entire under-parts *spotted* and *barred* with *dark* and *light brown*, the COMMON SNIPE having the centre of the lower breast and of the abdomen *white*.

3. The four outer feathers on each side of the tail have their terminal two-thirds nearly pure *white*. In the COMMON SNIPE all the tail-feathers are shaded or

barred with *black*, *brown*, and *chestnut*, to within a quarter of an inch of their tips; and the white that is so conspicuous on either side of the closed or spread tail of the GREAT SNIPE is absent.*

TAIL-FEATHERS OF THE GREAT SNIPE AND THE COMMON SNIPE (natural size)
1. An outer tail-feather of an adult Great Snipe.
2. An outer tail-feather of an immature Great Snipe.
3. An outer tail-feather of a Common Snipe.

The bill of the GREAT SNIPE is no longer than that of the COMMON SNIPE; but its toes are noticeable for their superior size, though the legs are (like those of a WOODCOCK) somewhat short in comparison with the body of the bird.

* In immature birds of the Great Snipe, the outer tail-feathers, as shown above (No. 2) are not so white as in the adults, but the number of feathers in the tail, the barred under-parts, and the size of the bird are alone sufficient to distinguish it whether old or young. When on wing, its heavy flight, and its bulk, together with the amount of white always present on the outer feathers of the tail (spread like a fan), *may* be a means of identification if the bird rises near you.

Nests.—The GREAT SNIPE has never been known to nest in the British Islands. It breeds in Norway, Sweden, Northern and Central Russia, and in parts of Siberia; less numerously in Denmark and North Germany; and sparingly in Holland.

The site and structure of the nest, and the shape of the eggs, are similar to those of the COMMON SNIPE. The eggs are, however, larger and handsomer in appearance, being more richly marked on a clearer ground-colour.

Though the GREAT SNIPE may occasionally be mistaken for the COMMON SNIPE, and in this way escape notice, it is, nevertheless, a *rare* bird in our Islands. A few are, however, usually obtained every year during the *autumn*, more seldom still in spring, but *never* in *winter* to my knowledge.*

The GREAT SNIPE rises silently, and does not fly in the twisting manner peculiar to the COMMON

* The Great Snipe visits us chiefly during August, September, and October, when migrating south from its northern breeding haunts. On its return northward again in spring it is said to avoid our Islands, as it is so seldom killed at that time of year; but shooting is then over for the season, and this may in some measure account for its supposed scarcity in the spring.

If, however, you hear of a Great Snipe being shot in *winter* or in any month of the year *except* the three named, do not credit the report *unless* you see the bird.

The majority of the Great Snipe obtained in the British Islands are young birds of the year.

Snipe, but much like a Woodcock that is flushed in the open.

The very few Great Snipe I have shot in the British Islands have, without exception, sprung from dry ground, such as fern or heather.

THE RED-BREASTED SNIPE

Length.—10 to 11 inches (or slightly larger than the Common Snipe).

Markings.—This Snipe, in winter, has its general plumage *grey*, like a Dunlin at the same season. The bases of its front toes are connected by very small *webs*, and it may also be known, in any stage of plumage, by its having the shaft down the centre of the outer long feather of each wing *pure white*.

The young, which are most likely to occur in this country, have the back varied with *blackish* and *light brown*, the latter shade being chiefly on the edges of the feathers. The under-surface *dull white* tinged with *pale brown*, especially on the breast. The breast slightly speckled with *dusky*. The flanks and under the tail *white* barred with *black*.

The Red-breasted Snipe (so named because in the *summer* it has a *red* breast) is a *very rare* straggler from America, that has been killed in the British

Islands on about a dozen occasions in the autumn. From its custom in its native country of gathering in great numbers on the sea-shore, and on the banks of ooze left dry by the ebb-tide, it resembles in its habits a shore-bird, such as a DUNLIN or a RINGED PLOVER, rather than a SNIPE. When we read of a score or two SNIPE being slain in America at one discharge of a large shoulder-gun, it is the RED-BREASTED SNIPE that is alluded to. The American name of this bird is 'Dowitcher.'

The males and females of all the SNIPE described are similar in size and plumage.

Note.—My friend Captain George Gould, who has killed more wildfowl of every kind than anyone else of my acquaintance, sends me (as given below) the weights of some of the heaviest COMMON SNIPE he has shot in the British Islands.

Scotland, January 6, 1887.—One Snipe turned the scale at 6 oz.

,, January 13, 1887.—One Snipe of 6 oz.

,, January 13, 1887.—One Snipe of 5½ oz.

,, January 16, 1887.—Three Snipe = 16¾ oz.

,, January 16, 1887.—Six Snipe = 33 oz.

Scotland, January 19. 1887.—One Snipe of 5½ oz.

„ January 19, 1887.—Seven Snipe=37 oz.

N.B.—The weights of all these birds were verified (with official scales) in Captain Gould's presence at the local post office.

LETTER XXIX

THE HABITS OF SNIPE

MIGRATION AND NESTING

THE large majority of the COMMON SNIPE we kill in the British Islands between October 1st and March 1st are foreigners, for soon after our home-bred birds are strong on the wing they most of them journey with their parents to warmer countries to pass the winter. No doubt a small proportion of our home-breeding SNIPE and their young winter on some of the south-western islands of Scotland, in the south-west of England, and near the Atlantic sea-board of Ireland, for the birds that visit *these* districts are seldom compelled by frost to leave for more southern latitudes.

If one quarter of the SNIPE that nest in the British Island *remained* with their offspring till the winter, they would be *very* numerous throughout September, instead of being found only in moderate numbers during the latter half of that month, as is the case, and which

numbers are *not* increased till the migratory birds arrive from abroad in October.

I know marshes in England, Scotland, and Ireland that are *full* of SNIPE, with well-grown young, in the last week of July, these birds having gathered from their nesting quarters in the vicinity.

These *early* breeding birds and their progeny disappear by the end of August, and are replaced in the first half of September by the birds that nested later, and whose young are *not* full-grown.*

The COMMON SNIPE that come to us in October from Northern Europe are often *said* to be birds bred in the neighbourhood, which, in company with their parents, are supposed to have collected on the low-lying grounds. I have noticed, however, that when SNIPE suddenly appear with an east wind in the beginning of October the young ones of the flight are all well grown, and hence, no doubt, have migrated from abroad.†

On the other hand, the immature birds belonging

* Many of the Snipe that nest with us in April have their first eggs destroyed by vermin, crows, frost and wet, and they then lay again in May and June.

† The small flights of Snipe that sometimes visit parts of England in September, and which often vanish as unexpectedly as they arrive, are most likely birds of the year and their parents working their way southward from Scotland, rather than, as generally imagined, migrants from abroad. It may be said that the majority of the wildfowl, whether Woodcock, Snipe, Plover, or Curlew that breed or are hatched in the British Islands, Ireland to *some* extent excepted, migrate to more southern countries shortly after the young are full grown, their place being taken later in the year by other birds of the *same* kind that have nested in Northern and Arctic Europe, many of which latter pass the winter with us.

to the district can be readily distinguished; for, being the result of late nests, their wing-feathers are short, and they could not have flown several hundred miles across the sea.

In Ireland SNIPE nest *much* more freely than elsewhere in the British Islands, and though it is probable the great proportion of these travel southward in the autumn, it is likely a good many of the SNIPE bred in Ireland remain therein for the winter, the climate and soil being so well adapted to their wants.

The migratory and home-bred SNIPE of Ireland are no doubt largely augmented in autumn and winter by birds from England, Scotland, and Wales.

If frost and snow occur in Great Britain SNIPE are *at first* driven to the sides of the springs and rivers for sustenance. Should the hard weather *continue*, the large and sudden influx of SNIPE to Ireland—which I have often witnessed—and their equally sudden disappearance from their favourite haunts in England, Scotland and Wales, suggest the idea that many of them cross to the softer climate of Ireland rather than migrate southward.

The COMMON SNIPE returns to its breeding haunts in our Islands during the second, and especially the third, week of March; and if the spring is *mild* lays its first egg near the 15th of April, but if the season is

cold and *stormy* the first egg is not produced till about the 20th.*

Should the spring be exceptionally warm and dry a small proportion of Snipe lay before April 15th, for under such conditions of weather I have found eggs in the first week of that month.

I have seen strong young Snipe on the wing in Ireland during the second week of June; but in England and Wales the birds hatched from the first nests are seldom able to fly well before the third week of that month, and in the north of Scotland not till July.

I have killed young Snipe with the down still among their feathers in August, but these are the result of second nests, the first eggs having been destroyed, for I have always noticed such very late birds are most numerous after a cold and wet April.

The weather in the spring has a good deal of influence on the number of Snipe that nest with us. If the wind blows strongly from the north and east during March, the Snipe that are migrating northward are hindered in their passage, and many of them re-

* I have often heard it questioned whether *old* or *young* birds return to their former nesting haunts in our Islands. If the *old* birds, as I consider is generally the case, then this accounts for the more or less regular numbers that breed with us, for if the young ones returned to where they were hatched to breed in the ensuing spring, in a few seasons their kind would be vastly more numerous than we ever see them. It is probable, however, that many of the Snipe (and Woodcock) that breed with us are *chance* visitors which are tempted to remain and nest because they find suitable localities, though it is likely a larger number systematically revisit their old haunts annually.

main to breed in the British Islands that, with a wind more favourable for their voyage, would have passed on.

I have seen numbers of SNIPE arrive with a west, or a south-west, wind in March, rest a day or two, and then leave. I have also known SNIPE appear during a succession of north-easterly gales and delay their departure till almost April, a considerable number of these remaining to nest in the locality in preference to journeying for this purpose against a strong adverse wind to Northern Europe.

I have found the nest of the SNIPE at all altitudes—in the dry spots of the fens and marshes, on the hill-sides among the heather, and at the summit of mountains 1,500 feet high; but always near some shallow water or wet ground that is suited for the feeding requirements of the bird on leaving its nest at dusk, and to which the young can also resort after they are hatched.

THE DRUMMING OF SNIPE

SNIPE commence to produce this strange noise when pairing about the last week of March. It is the male that in the daytime usually 'drums,' which he does high in the air over the female while she rests on the ground, forms her nest, or sits on her eggs. The female also 'drums,' especially in the evening, as I have

—contrary to my inclination, but merely to prove such *was* the case—shot several females as they were descending to alight after making this sound directly above me.

It has long been a matter for conjecture how the 'drumming' of the SNIPE is caused, and it is a question that will *never* be finally settled, for no one can accompany the bird in its flight overhead.

Many folk avow the wing-feathers alone cause the sound, others maintain the feathers of the tail are responsible, and some assert it is the wings and tail combined.

The old supposition that the 'drumming' of a SNIPE might emanate from the throat is at all events exploded, for reliable persons have heard a SNIPE 'drum' and utter its shrill cry at the *same* moment. Two such distinct notes, so entirely different in tone, as the peculiar cry of the nesting season and the 'drumming' could not possibly be uttered simultaneously by a SNIPE, any more than a man could sing bass and tenor in one breath. I have never heard a SNIPE call when 'drumming,' for I have *invariably* remarked its bill is *closed* at that time.

With the aid of a powerful telescope I have constantly, and by the hour, observed *all* the movements of SNIPE when 'drumming,' but I have never detected *any* tremulous quiver of the *wings* themselves which is said to occur. I have, however, frequently been able to notice, as the 'drumming' noise was produced, that

the *webs* of the feathers of the wings, but *not* those of the tail, were quivering, similar to the way in which a flag shivers in a strong wind.

When about to 'drum' a SNIPE first soars aloft in wide circles, not straight up, but at a slight angle to the earth. When at its highest altitude it beats its wings quickly several times, to gain momentum, and sweeps rapidly downwards in an easy curve towards the ground. The 'drumming' is then heard, faintly at first, but louder and louder as the bird drops faster and faster, and gradually ceasing as the impetus of its dive is checked preparatory to the next mount upwards.

Our SNIPE then flies slowly skyward again for its ensuing drop through the air, but as it ascends *no* sound of 'drumming' is *ever* heard. Just as a SNIPE reaches the height from which it intends to stoop it generally emits its curious short metallic call, which, however, in no way resembles the 'scape, scape' so familiar to the shooter.

A SNIPE when 'drumming' does not fully extend its wings, but has them slightly closed, as shown in the illustration opposite, which is reproduced for me by Mr. Whymper from one of many I have sketched when viewing the antics of this bird through a strong glass. It is probable that the concave space formed under each of the partly folded wings of the SNIPE as it rapidly descends, always *against* the wind, concentrates the air, and compels it to rush between

the wing-feathers with much greater force than if they were stretched flat like the front of a kite.

It is possible this violent current of air passing *between* (*not* through) the webs of the longer feathers of the wings turns them a little edgeways to the wind,

SNIPE DRUMMING

and when in this position their vibration causes the aerial sound styled by such fanciful names as 'drumming,' 'neighing,' and 'bleating.' *

That any noise can be made by the air humming

* I do not consider the 'drumming' of a Snipe is the result of some peculiar formation of the feathers, but that it is caused as I have above described. I have been shown a supple stick with some of the wing and tail-feathers of a Snipe attached to its end, which on

through the soft tail-feathers of a SNIPE as the bird swoops downwards I do not credit, for a SNIPE if 'drumming' drops more or less perpendicularly, the tail *cannot* then *meet* the wind to nearly so great an extent as the feathers of the wings are able to do.

Anyhow, term it as you will, and in whatever way it may arise, this 'drumming' of the SNIPE is *most* remarkable for its *volume* and *power*. I have often heard it so loud and clear, and apparently near, that I could scarcely believe it was created by a bird little larger than a lark, when a mere *speck* in the sky, and which the *eye* often failed for some time to locate, though the *ear* at once caught the distinct and prolonged sound it produced.

HOW SNIPE FEED AND WHERE TO FIND THEM

It is a not *very* uncommon remark to hear that a SNIPE (or a WOODCOCK) lives by suction, the bird, as it probes, being supposed to imbibe some infinitesimally small creatures out of the water and mud!

A SNIPE discovers its food by a sense of *touch* (and *perhaps* in a small degree by smell), the highly sensitive nerves of its bill enabling it to do this when the worms and mollusca, on which it chiefly exists, are two or three inches below the surface.

being waved rapidly to and fro gave forth a 'humming' noise, but I find the feathers of many other species treated in similar fashion produce precisely the same sound-effect as the feathers of the Snipe.

A Snipe walks leisurely along with lowered head, —the point of its bill almost tickling the ground— till it meets with a suitably soft spot for 'boring,' which it then does systematically in all directions, *feeling* for some morsel to its taste, which, when seized, it devours *without* withdrawing the *end* of its bill from the soil.

I have had both Snipe and Woodcock under close observation in captivity, and they are as similar in habit as they are in shape.

A Snipe or Woodcock when kept in confinement will snatch up a worm laid in view on wet sand, but they delight rather in drilling the sand all over with their bills, and will in this way quickly discover concealed food.*

I consider both Snipe and Woodcock are able to locate their food by the *sound* of the movements *underground* of the creature sought. I find if I bury a small worm a couple of inches beneath sand, either of these birds will instantly stop, as if listening, when they approach the spot, then after a second or two the bill is plunged in, even up to the forehead (which may often be seen caked with mud), and the prize is very soon obtained and drawn down the throat.

* Woodcock and Snipe when seeking sustenance in *wet* places bore holes in the soil in a precisely similar manner; but a Woodcock, if pressed by hunger, will, as we know, gather food by sight, as, for instance, among the dead leaves of a wood. A Snipe in my experience always feeds on soft open ground, and obtains its food only *below* the surface.

The old-fashioned idea that WOODCOCK or SNIPE press their bills against the earth to enable them more easily to take wing, no doubt arose from the fact that if by chance a COCK or SNIPE is seen by day on the ground, it is usually observed in the act of feeding with inserted bill, and hence springs into the air from *this* position on being alarmed.

The shooter complains that SNIPE are provokingly whimsical in their movements, simply because they are not to be found in the same localities every day, or because the birds appear and vanish, for no apparent reason that he can see, from places that he considers should be favourable to their presence at *all* times in the proper season.

SNIPE will, with a strange persistence, sometimes adhere to certain spots throughout the winter, or else they will shift their ground from day to day, and this they do in relation to the abundance or scarcity of their food. They are not, therefore, so capricious in changing their quarters as is supposed, though the sportsman who has trudged miles for an empty bag, on what is *usually* good land for SNIPE, is apt to grumble at the wandering nature of the birds.

I am not now alluding to the migratory SNIPE that come to us from abroad in October, as many of these arrive and depart at very short notice, merely, perhaps, resting a day before they continue their journey southward.

The birds I refer to are those, whether migratory or home-bred, that have settled down in their haunts for the winter, to remain till extreme cold weather forces them to leave for warmer climes, or till they voyage to Northern Europe in the spring.

On *dark* and on very *windy* nights SNIPE are, to a great extent, unable to feed (SNIPE, like WOODCOCK, *naturally* feed by night and *not* by day).

On a dark night SNIPE cannot readily find the small patches of soil that are suitable for them to probe in for food, and being light, high-standing birds, it is difficult for them to feed with comfort in a strong wind, for they are then blown about and their feathers are ruffled, just as you may notice happens to PLOVER in stormy weather.

The day after a dark or a *very* rough night, however clear the latter may have been, you will usually find SNIPE are wild and restless, as they are on the *alert* seeking the food they could not obtain the night before, and are, as a result, quick to notice and fly from any object they deem suspicious.

During a quiet moonlight night, or a calm starlight one, SNIPE can feed to their fancy, and on the succeeding day, *if* fine, they will generally (*not* always) sit close, as they rest and sleep after their exercise in flying and feeding from dusk to dawn, as well as from the effects of a surfeit of food; and they are then,

of course, not nearly so watchful as when trotting about seeking sustenance.

The weather has in other ways a considerable effect on the wildness or tameness of SNIPE, for even after a fine night they are often restless by day, especially in the afternoon, if the wind is boisterous, with rain and a lowering sky; maybe they cannot sleep in peace, or else they are feeding, their instinct telling them that during tumultuous weather they will be unable to do so the ensuing night.

The day for making a bag of SNIPE is when a dull fine one,* with a fresh breeze and a *rising* glass, follows a clear still night without frost. With a fast *falling* barometer my experience is that SNIPE are *always* uneasy.

After a good night's feed SNIPE frequent *dry* spots by day to repose in till the evening, such as the patches of sedge and grass that may be seen on the small flat islands and the shores of a shallow lake, or which fringe the margins of dykes, rivers, and marshes. They are also very fond of sleeping in the drier portions of wet meadows if there is some coarse herbage for their concealment and as a shield from the wind.

After a *dark* night the SNIPE will then be on the feed, and you should seek for them the next day in moist and *not* in dry places.

* Not a *dark* day, for in a *bad* light it is difficult to see the birds as they spring, more especially if they rise wild, and the vegetation (as it often does) assimilates to the colour of their upper plumage.

In floods, heavy rain, and gales, SNIPE soon leave exposed ground for better shelter, which latter is often at some distance from where they seek their food. In rough wet weather I have, for instance, frequently seen SNIPE very numerous among thin dry heather and rank grass on the *leeward* slopes of low hills.

If it is fine and mild SNIPE disperse here and there over a large extent of country, and may be sprung one by one close to any spring or pool, however small, round which they feed by night. In a marshy district you may often enjoy good sport by walking *direct* from one little piece of wet soil to another throughout the day, killing, perhaps, a SNIPE at each place. *This* is the way to make a bag, for if a few SNIPE are distributed here and there you can kill *far* more than when thrice as many are collected in a limited area.

If a frost sets in, SNIPE desert all high and outlying localities and assemble on low undrained land; they are then, for a few days, to be seen in numbers, and are erroneously regarded as 'large flights that have arrived from abroad.' At such times they are prone to rise in wisps, and when they do *this* they are *always* wild, and it is *very* difficult to kill even a small proportion of those observed.* Should the frost continue,

* When you notice that Snipe day after day rise in a wisp of, perhaps, fifty to a hundred from a certain piece of wet marshland, do not fire at the birds as they spring. Conceal yourself *facing downwind* at this favourite spot, send a man to flush the Snipe where they alight, and you will obtain shots at the birds as they

SNIPE leave the fens and marshes, as these soon freeze beyond the power of their bills to penetrate the soil, and they then visit for food the soft edges of the ditches, rivers and springs, and the little trickles of water that run through the open drains of wet fields. Near these places you will at such times find the birds by day, always provided there is some rough growth available for them to hide in.

If the frost becomes intense, the majority of the SNIPE leave our Islands, and those which remain desert even the edges of running water, and frequent by night *and* day the soft ground round the springs, the warmth of which permits the birds to probe for food.

When SNIPE are dispersed over the country by day, many of them will flight at night to feed after the manner of DUCK and WOODCOCK. I have seen SNIPE arrive at dusk, a half-dozen together (always head first out of the sky), to alight on some hollow in a usually hard and dry meadow that had been soaked by floods or rain sufficiently for them to drill the earth with their bills.

It is curious how one SNIPE will often take up its quarters in a little plash of but a few yards square, and how, if you kill this bird, it is time after time

return singly or in twos and threes (which they are sure to do) to their original haunt. I have made some fine bags of Snipe in this fashion, when by *walking* after them I might have worn the soles off my boots ere I killed a few couple. You will have to shoot from a sitting position, and the best form of seat for soft soil is an old wine hamper with the lid securely fastened.

replaced by another; just as when you catch a trout in some small eddy of a stream, another fish soon occupies exactly the same position.

In both cases it is, of course, the plenty and convenience of the food that is the attraction, and no doubt the tenant of a favourite haunt like this drives away intruders, on the principle that what is enough for one is not sufficient for two.

You may always notice that any isolated corner that a SNIPE resides in by himself, invariably has a tuft of long grass or a few rushes close at hand for the bird to sleep in after feeding, and from which it generally springs.

A SNIPE will visit the most unlikely-looking places *if* its food is to be found therein, and I have, before the water was admitted, seen these birds rise from the wet trampled mud at the bottom of the Manchester Ship Canal, within a hundred yards of many scores of navvies busy excavating, and with machinery rattling and steaming on all sides.

Because you see the holes drilled by SNIPE when boring for their food, this does not show they are, or have lately been, in the vicinity, as these marks last till they are effaced by heavy rain; but if you notice *fresh* droppings on *marshy* ground the birds are *never* far off, for SNIPE-droppings are quickly absorbed by wet earth, though on *dry* soil they are *no* evidence, for they will *then* remain several days.

You will usually find SNIPE in fens and water-

meadows that contain cattle, for Snipe are not very particular at times how they seek their food.

I have now explained the *reasons* why Snipe are sometimes wild, and at other times tame. This information will give you some idea of *when* to follow the birds and *when* to leave them alone, for undisturbed they certainly should be on occasions.

If, for instance, the Snipe in a marsh are very wild or in wisps, and you wish to have good sport, it is no use harassing the birds for the sake of a couple or two at the risk of driving away a great many, for if you worry Snipe when they are in a *restless* humour they may leave for the season, and you will *not* have the chance of filling your bag on some future day when they do sit well to the gun.

I have also told you sufficient of the habits of Snipe to assist you as to *where* to seek for them under different meteorological conditions.

As I cannot accompany you on marsh and fen, and in case you do not realise the varying moods of Snipe as I have endeavoured to elucidate them, I will give you this final advice: 'When you find Snipe in certain places, *write* down a careful memorandum of the state of the moon, wind, and temperature, and if the previous days have been *wet* or *dry*; then, and as nearly as you can under the *same* phases of weather, seek the birds just where you found them *before*, for *if* still in the district you will probably meet with them again in their former resorts.'

LETTER XXX

HOW TO SHOOT SNIPE

Dogs for Snipe Shooting

If the ground over which you shoot has little *cover*, is very *wet*, the Snipe *wild* or in *wisps*, or a *white* frost has covered the shallow plashes of water with thin crackling ice, I would advise you to leave the best Pointer or Setter in the world *at home*, and only take out your Retriever or Spaniel to find dead and winged birds. Setters or Pointers under the above and very usual conditions will do you more harm than good, and when running through water and ice the noise made by the feet of a dog will always be liable to spring many more birds *out* of shot than he will 'stand' for you *in* shot.

If, for once in a way, Snipe are not wild, the ground is well covered with rank grass, sedges, and rushes, is soft but *not* flooded, and there is no frost, a reliable *close*-working Pointer is *invaluable*, as he will not only save you much needless walking, but will show birds that you would not have seen without his aid, more especially Jack Snipe, if you care to shoot them.

A Pointer that has been trained for Grouse on the

moors, or for PARTRIDGES in the turnips, is of little use, for he will range too fast and wide; what you require for SNIPE-shooting is a dog (an old one for preference) that works *slow* and *near*, and will, above all things, down-charge at once when you raise your hand. A dog that continues to range but a *few* moments too long *after* your signal to him to down-charge is fatal to success, especially when SNIPE are rising at all wild.

A Pointer is preferable to a Setter, as he is much easier to train on SNIPE, and when you *have* taught him his business, keep him for it, as if really good on SNIPE he *should* be of little value for other birds, game or wildfowl.

A Setter can be taught to both 'stand' SNIPE *and* retrieve them, but is best suited for the open moor and *not* for SNIPE ground. He is apt to not only require the disquieting influence of your voice, but also to range, however well broken he be, a *few* yards *too far* from you, and though he may find some SNIPE he will be very liable to flush others just *out* of shot.

For a shooter with nerves not over steady on SNIPE, a dog to find the birds is of great assistance in killing them, as a dog pointing is a *signal* to *prepare* for a shot, and the young sportsman will not be so flustered as if the bird unexpectedly rises with its startling cry to his right or left.

In the foregoing remarks I allude to SNIPE when they are *not* wild, and hence will allow a Setter or a

Pointer to find and 'stand' them for you. In nine cases out of ten Snipe are, however, too shy to permit a dog to draw near and point them. You may, indeed, in most localities, discard the assistance of a Pointer or Setter, and employ a retrieving Spaniel to show the birds. This he will do not so much by scenting the Snipe, as by bustling about and flushing them as he runs to and fro within short gun-range of you.

A well-broken Retriever or Spaniel is at all times *indispensable*, for you may mark a dead bird to within a yard or two, and if it falls *back* uppermost amid sedge and long grass you may trample about within a gun-length of it and yet not see it. You may thus lose not only valuable time, but, from looking downwards at the moment, fail to notice, or, from firing in a hurry, clean miss, a bird rising close to you that is put on wing by your movements.*

If a Snipe falls with its white *breast* upwards, you can generally see it, and you need not then allow your Retriever to hunt, for the less often he leaves your heels the fewer the Snipe will he disturb.

For this reason ('tis no easy matter at first) learn to mark *dead* birds *accurately*, and to recover them with as little assistance from your Retriever or Spaniel as possible.

* A Retriever or Spaniel is most useful in another way, for they will fetch many a bird *you* cannot reach; as, for instance, one that falls on shaky soil, or in deep water. Nothing is more annoying than to see a Snipe lying dead on the far side of a deep dyke that you cannot jump or wade, and are *not* likely to try to *swim*.

How to Work Snipe Ground

There is no doubt, *if* you *can* manage it, 'tis a successful plan to walk *downwind*, as SNIPE invariably *rise* head to wind whatever direction they may afterwards take. The birds will then spring on wing towards you and, for a second, steady their flight ere they dart off, which they will do rather to the right or left than straight from you.

If you walk *against* the wind SNIPE as they rise will head it and fly away instantly, low and fast, and will *not* offer crossing shots.

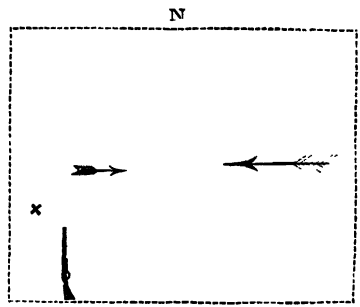
Both methods have their *pros* and *cons*. If you walk *downwind* you approach the SNIPE *facing* you, for all birds feed and rest head to wind, and they are at such times likely to see, hear, and scent you.

If you walk up SNIPE *against* the wind they will be facing the *other* way, or from you, and you may, perhaps, come fairly close to them *before* they rise, and for *this* reason kill as many, though the shots offered will *not* be crossing ones.*

You cannot *satisfactorily* work a Pointer (or Setter

* Snipe are never so easy to see if you walk against the wind as when you walk with it. In the former case the birds slip off so close to the ground for the first few yards of their flight that in a bad light it is often difficult to detect them before they have flown some distance. If, however, the shooter walks downwind, the Snipe will rise towards him, throw up into the wind to avoid him, and their white under-plumage as they turn away will then usually attract his eye.

if you use one) straight *down* wind, as he will be forced to meet the wind to scent his birds, and instead of working *near* you as he *should* do, he will be obliged to circle round and come to you upwind, which implies that in the first or downwind part of his course he will



Example of how to work a Pointer or Setter on Snipe in accordance with the prevailing Wind

Inside the dotted lines repre-ents a tract of Snipe marsh.

The large arrow shows the wind is in this instance from the East.

The gun points in the direction the shooter should therefore walk, i.e. from S. to N., and also shows that he should commence on the *downwind* side of the ground.

The × is the dog working to the left of the shooter as the latter advances.

The small arrow points in the direction the Snipe will fly, that is from W. to E.

N.B.—When the shooter has reached the northern boundary of the marsh he should *retrace* his footsteps (it will pay him *well* to do so), and then take another narrow beat like the first from S. to N., return in his tracks, and so on till all is finished; his *last* beat will be on the east side, *no fresh ground* having been walked *except* from S. to N.

unavoidably flush more birds out of shot than he will subsequently find and 'stand' between you and him.

There are *few* places you *can* beat for Snipe ex-

actly to suit the wind, for you will generally find you have to walk just as the pools, streams, and ditches permit. I do not mean you are to wander about in haphazard style when Snipe-shooting, for you should search the ground as systematically as its formation will allow. If you have no dog with you except your Retriever, or you utilise a Spaniel to merely flush the birds, then walk downwind *when* possible. If you run a Pointer or Setter, walk *as much as you can* with the wind blowing from your right-hand side (see diagram, p. 365). By acting thus your dog can scent his birds without much risk of putting them up out of range, and you will obtain cross shots as they head the wind (always the easiest ones), and shoot at them as they fly to your *right*, when they are less difficult to hit than if they fly to your *left*. The birds you do not kill will also have a chance of pitching again farther on as they fly away head to wind.

Towards the end of the day, when you are, may be, anxious to procure a few birds to make up a round number (even 10 couple sounds fuller in the mouth than 9½), do not waste the last precious hour of daylight by racing over all the ground you can. Go direct to the two or three small, and which you *know* to be favourite, spots where you *first* flushed birds in the morning; as by the evening the ones you did not kill will have settled down again in their original quarters.

I have often added to my bag in a surprising way in this fashion just before dusk.*

I have told you how Snipe, when they are resting or feeding, will always seek shelter from the wind.

It may often happen that a shooter walks up or down the sides of some sluggish marsh-fringed river, or dyke, to look for sport. There are two ways of doing this—a right and a wrong one.

If, for instance, the wind blows from North to South across the river here sketched, the Snipe will surely

* Make certain your Snipe are all as *dead* as Julius Cæsar before you put them in the bag or pocket. A Snipe has a very small body, and often receives only one or two pellets of the charge—sufficient that is to *stun* the bird, but perhaps not enough to kill it. Well do I remember how once, after a couple of hours of hard walking, I at length obtained, just at nightfall, the *one* additional bird I required to make up my total to twenty couple for the day, and thus win a considerable wager. My gun was *unloaded* and handed to an assistant, and I was regarding with much satisfaction my row of forty Snipe laid out on the grass, when, on a sudden, one of them sprung off the ground and flew away, calling 'scāpe, scāpe, *escape*,' with all its might.

be feeding or sleeping under the sedge and grass of the North bank; if, therefore, you walk along that bank between A and B the birds will *not* see you at a distance, and may rise within shot. But if the wind blows from South to North, and you walk the North bank, the SNIPE will detect you from afar and rise wild, for in such case they will be taking shelter *opposite* to you on the other or South side of the stream, which is the one you should, of course, have followed the bends of, between C and D.

HOW TO USE THE GUN ON SNIPE, WITH SOME CONCLUDING REMARKS ON SNIPE-SHOOTING

Banish from your head, as nonsense, all idea of waiting till a SNIPE ceases to twist *or* you may wait till the bird is out of reach; or, when you find it twists rather more than less, fire a long despairing shot, and have no chance of another, for it is the *second* barrel that kills most SNIPE.

SNIPE-shooting is *snap*-shooting; never delay for a favourable chance, but pull trigger at your bird when and where you can from 20 yards up to 50 yards, for even at the latter range a SNIPE may often be dropped like a stone with No. 8 shot.

Take your bird *instantly* it rises, for the longer you delay, the faster and higher flies the SNIPE, and the more it gyrates. If it happens a bird springs *too* close, do not raise your gun and follow it with the muzzle till

it is at a fair range, as this will be liable to make you a 'poking' shot, or one that will *never* be good on Snipe. Wait till the bird is at a proper distance and *then* lift your gun and fire with as little hesitation as possible.

Quick sight to detect a bird the moment it rises, rapidity (*without* any flurry) in firing, and a practice of always aiming with *both eyes open* instinctively for the *bill* of a Snipe, are the grand secrets of killing him.*

Of course a gun should fit you to *perfection*—that is to say, it must point fair on the mark the *moment* it is brought home to the shoulder. If a gun does not come up true, you will have to alter its direction *after* it is to the shoulder, which means taking *two* sights at a bird instead of *one*—a hopeless state of affairs, for depend on it the Snipe will not wait while you correct your aim.

Given a gun that fits you *well*, it will have to be a *light* one, for every extra ounce tells when you are walking swampy land. At the end of a day's covert shooting you may possibly bring up with ease a 7-lb. gun for a deliberate shot at a Pheasant sailing over-

* The cry 'scāpe, scāpe,' that is made by a Common Snipe when flushed, is apt to startle out of their composure many young sportsmen, and so cause a too hurried aim.

This call of the Snipe is a natural one at all times during the winter, for I have frequently heard the bird utter it when flying about its undisturbed feeding grounds at night.

head, but you will surely find when firing snap shots at Snipe, after a long tiring tramp on treacherous ground, that with a gun of ordinary weight your aim will be a *little under* most of your birds.

A 12-bore *cylinder* gun weighing 6¼ lbs. loaded with 1 oz. of No. 8 shot and 3 drs. of powder, is the weapon for Snipe.* Both barrels should be bored the *same*, as, if one is *choked*, its small pattern will likely enough cause you to miss your second shot if it is as near as the first. A choke-bored gun will *never* be so easy to *hit* a Snipe with at from 30 to 40 yards as a cylinder.

From the extension of the pattern of a cylinder gun a Snipe is often less hard to kill with the *second* barrel at 40 yards than with the *first* at 25 yards, as at the shorter range you have not the well-spread disk of pellets that at the longer one allows for *some* inaccuracy of aim.

I advise you, when Snipe-shooting, to walk in a pair of easy, well-greased, *thin* lace boots (the grease will keep them soft to the feet), and to make up your mind to be wet for the day, which won't hurt you if you *change* when concluding your sport.†

If you are of a delicate constitution, do not pursue

* For close-lying Snipe (*when* this event occurs) No. 10 shot is a deadly size, but for general use No. 8 is better and will also kill a Duck or a Teal. No. 10 is very apt to only wound Snipe if they are rising wild.

† Carry your dry boots and stockings in a small canvas kit-bag.

Snipe, turn your attention to birds that frequent drier ground. The sportsman who does not, however, mind wet feet will walk with far more ease, and hence shoot *much* better, than the man who toils along in heavy and hot waterproof boots, dragging one weary leg after the other.

The most difficult shots at Snipe are when the birds are *driven* to the gun. I am acquainted with marshes in various parts of our Islands where reed shelters are erected for the shooters to hide behind. The wildfowl are sent over the sportsmen by the keepers, the Duck and Teal tumble from the clouds, but the Snipe, even at *moderate* altitudes, rarely fall. When a Snipe passes over a line of crack guns posted for Grouse driving, it is curious how seldom the bird drops to the half-dozen shots or so fired at it.

If you can usually kill three out of five Snipe, firing one or both barrels, you are a very fair marksman; and if you can kill four out of five Snipe, using both barrels if necessary, you are a fine one. Should you, as a young shooter, ever kill twelve Common Snipe

that has its top edge hemmed down over a strong running tape, which latter can be drawn together and tied in a bow to close the opening. Add a strap of broad webbing to sling over a man's shoulders. You then have a bag that can be washed when necessary, which weighs next to nothing, is most suitable for putting your muddy boots into ere you start for home in the evening, and is besides a convenient receptacle to keep your change of foot-gear in during the day.

in twelve successive single shots in *one* day in the British Islands with an ordinary gun and charge, my publishers will present you with a copy of this book with great pleasure.*

* I have always found that Snipe in a warm climate are easier to kill than those at home, especially the Snipe of India, as these have a heavier and more regular flight than ours.

The record below (copied from the original and given to me by my friend Sir John Dillwyn-Llewelyn) is from an old game-book at Penrice in Glamorganshire.

'Fowles killed in fower weeks for ye use of my honorable master Sir Edward Mansell. 1676.

Ducks	190	Teals	177	Whistlers	131
Curlews	28	Woodcocks	268	Snipes	120
Quests	4	Wildgeese	9	Pluvers	7
Seahens	40	Landrail	2	Cranes	2
Bitterns	2	Gnots	2	Swans	1
Partridges	24'				

The above total of 1007 wild-birds is a wonderful one for a fowler to make in a month in the year 1676. It was done in the days of single guns and flint-locks, and before the use of small shot was generally introduced. The 'Cock' and Snipe were, however, many of them, no doubt, caught in nets and snares, and others killed with fine gravel when feeding by night at the springs in time of frost. Some of the Ducks, Teal, and Whistlers (i.e. Wigeon), may have been caught in a decoy, though I can find no tradition that one ever existed at or near Penrice.

LETTER XXXI

CURLEW, WHIMBRELS AND GODWITS

THE CURLEW

Local name.—WHAUP.

Length.—20 to 26 inches.

Weight.—1¾ lb. to 2 lbs. 6 oz.*

Markings.—Too well known to require description. The very long and down-curved bill of the CURLEW identifies this bird, generically, at a glance, and its superior size distinguishes it from the WHIMBREL. (See illustration on next page.)

Nests.—In small numbers, but generally distributed, on the moorlands of Wales, and on those of the west and north of England. CURLEW may be said to nest more numerously in Derbyshire, Lancashire,

* Curlews, even when adult, vary greatly in length and weight. The largest I ever killed weighed 2 lbs. 10 oz.

Yorkshire, Westmoreland, Cumberland, and Northumberland, than in all the other English and Welsh counties together.*

WHIMBREL. CURLEW

* Curlew nest sparingly in the south-west of England, chiefly in Devon and Cornwall; I have also seen a few pairs in summer, possibly

CURLEW breed rather numerously on many of the heather-clad hills and flats of Ireland, but *far* more freely and universally in Scotland than elsewhere in the British Islands.

In the south-east, and east of England (south of the Humber) CURLEW do not nest. Abroad, the CURLEW breeds in suitable localities in Northern and Central Europe.

The nest is sometimes a mere scratching in the open, at other times it is placed among heather or grass, and is lined with dry stems. The eggs are four in number, of an *olive-green* ground-colour, spotted and blotched with *brown*.

CURLEW are common to our shores in winter, and a good many pass the summer in the neighbourhood of the sea; the latter being usually immature and non-breeding birds.

The CURLEW that may be noticed in summer on the shores of the east and south-east counties of England (Yorkshire, Durham, and Northumberland excepted) could not be nesting, as there is no suitable moorland for the purpose within a daily flight of this section of the coast.

I, at one time, considered that most of the CURLEW to be seen in summer on the tidal banks of the

birds that were nesting, in the wilder parts of Hampshire, Dorset, Somerset, and Wiltshire.

Welsh, Scotch, and Irish sea-board *might* be breeding birds seeking food, or else males that had associated whilst their females were laying and sitting inland.

A close observation of the habits of CURLEW in summer has, however, convinced me that neither the males nor females of the pairs which have nests visit the sea-shore till their young are able to fly, *unless* the eggs are laid within a mile or two of the tide; but CURLEW usually select situations for nesting in that are at a considerable distance from the sea.

I have seen large numbers of CURLEW on nearly all parts of our coast (the west of Ireland excepted), arriving and departing in flights during the last week of March and till the end of the third week of April.*

These gatherings do not, as commonly supposed, separate into pairs and seek inland resorts in the British Islands in which to nest, but are voyaging to more northern regions, having delayed their migration till instinct tells them the climatic conditions of their usual breeding grounds are suited for their reception.

* In the same way I have, besides Curlew, often observed numbers of Golden and Green Plovers, Redshank, Dunlin, Ringed Plover, and Oyster-Catchers, passing northward three weeks and more after the members of their kind that *intend* to breed with us have occupied their nesting quarters. These flights are merely working their passage in leisurely fashion to Northern Europe, where they will time their arrival just as winter gives place to the milder weather of spring.

Three weeks previous to the date at which these migratory CURLEW come from the southward on their way north, the *birds* that *nest* with us are always *paired*, and sometimes *laying*, even in the north of Scotland.

The great majority of the CURLEW that we see on the sea-shore throughout the winter also travel northward in flights between the end of March and the middle of April, or some time after our home-breeding birds have settled down in their summer quarters.

The CURLEW that nest with us, wherever they come from, reach our moorlands the first week of March, *not* in *flights* but in *pairs*.

The CURLEW that appear on the estuaries of the British Islands in September are probably nearly all young birds that were bred on our moors during the summer.*

About the first week of October the parent birds also desert their inland haunts and resort to the margins of the tide. Towards the end of October large numbers of 'foreigners' arrive and settle down here and there along with our home-breeding birds

* I once killed 47 Curlew at a shot from a stanchion-gun on the shore of an Irish harbour in the third week of September, and almost *every* bird was a young one of the year, and I have found this to be the case whenever I have shot Curlew on the coast in that month.

and their young that are already established in their quarters for the winter.

The CURLEW that annually frequent our tidal rivers and harbours in autumn and winter are seldom increased in number by fresh arrivals after the first week of November; nor do they often leave before the spring, as CURLEW can gather food on the sea-shore even in severe frost. There are no wildfowl whose movements are easier to observe, for CURLEW adhere to their chosen haunts for the winter, and locally fly from place to place with wonderful regularity.

CURLEW, during the winter, commonly feed on the rocks and banks exposed by the ebb, and when these are hidden by the flood-tide, and the birds are washed off their legs, they fly to the land, where they rest till the ebb again lays bare the banks of ooze and sand they frequent for food.

Though CURLEW may retire a couple of miles inland during the time of high-water, yet the *moment* the flats of mud and sand are uncovered by the ebb-tide they hurry to them with one accord to search for the marine worms, mollusca, and the other minute creatures they exist on. But how, when the sea is hidden from their view, they mark with such unfailing accuracy its daily changes is beyond surmise. I have constantly seen CURLEW, that have been stalking about on fields two or three miles from the coast, fly off seaward, as if by concerted signal, so as to time their arrival at a bank of sand

before it was visible, but just when the tide had ebbed sufficiently to permit them to *wade* on it.

How to Shoot Curlew

I have had good sport with Curlew on a windy day (they then fly low) by carefully noting the *exact time* when the tide forces the birds to quit their feeding grounds on the coast, or when it uncovers these spots so that they can return to them again.

To shoot Curlew with a shoulder-gun in this fashion, hide *between* the localities the birds select on the ooze for feeding and those they visit inland for resting on during high-water, and as they pass to and fro you may procure several shots.

You will find a tidal almanack useful for consultation, as on this you can previously note the number of minutes *before* and *after* high-water, at which the feeding grounds of the Curlew are daily covered or exposed, and thus calculate to a nicety when the birds are likely to flight over you.

You will, without such assistance, be very liable to be astray in your reckonings, though the Curlew are *never* in error respecting the ebb and flow of the sea.

Sometimes, especially when the country is deep in snow, Curlew, instead of flying inland at high-tide, assemble on the small flat-topped islands of the estuary

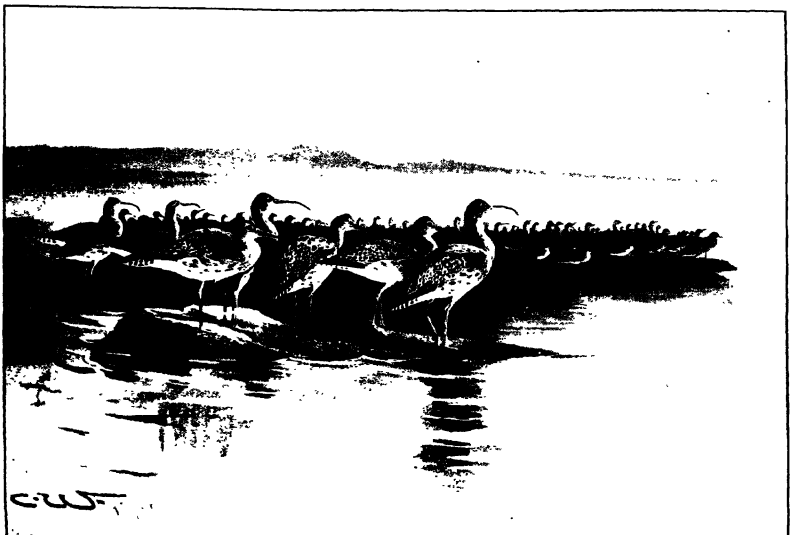
they frequent, if these are a foot or two only above the level of the water.

I have often seen CURLEW in hundreds on little smooth islands of about a quarter of an acre in extent, and so densely packed that there was apparently not standing room for another bird, all patiently waiting till the ebb-tide exposed the banks of ooze in the vicinity on which they were in the habit of feeding. (See sketch facing next page.)

Try to approach one of these great gatherings by daylight with a punt and stanchion-gun, and you will find it a hopeless task. There are too many keen eyes watching for danger to allow you to do so; but if high-water is at *dusk*, or at the grey of *dawn*, you *may*, perhaps, once or twice in the season steal up unobserved and obtain a heavy shot.

If you wish to make fairly certain of success, arrange the elevation of your big-gun *by day* so that its charge, if fired at sixty yards, will sweep the ground the birds collect on; then return *by night* just at the top of high-water, and fire on chance, as near as you can judge, at the centre of the island.

The CURLEW *may* be on the island or they may *not* (they are often silent as mutes at such times), but if they *are* present, it is possible, as I have more than once done, you will pick up fifty to sixty birds as the result of a 'shot in the dark,' but it will be your *first* and *last* for the winter on *that* spot.



CURLEW RESTING ON A SMALL ISLAND DURING HIGH-WATER

The female CURLEW is *said* to be always larger than the male, but this I cannot endorse, for I have on many occasions killed birds of both sexes out of the *same* gathering, the one just as heavy as the other; old males in my experience measuring and weighing sometimes more than old females.*

I have also shot adult CURLEWS, male and female, that did not exceed 1½ lb., which is the weight of a young bird in September.

In fact, CURLEWS vary extremely in size, and as the large and small birds keep very much *apart*, this suggests the idea that two races *may* visit the British Islands.

There are many weird-sounding calls emitted by wild-birds, that a fowler may hear from dusk to dawn on the ooze and shallows of the sea, but none to my mind echo with such piercing distinctness, or are so in harmony with the loneliness of the night and the dreary surroundings of the duck-shooter, as the long-drawn wailing cry of the CURLEW.

* I formerly imagined the females of the Curlew *and* of the Whimbrel were larger than the males, but the dissection of a large number of both these birds in the last ten years has reversed my opinion.

THE WHIMBREL

Local names.—MAYBIRD, JACK CURLEW, HALF CURLEW, LITTLE CURLEW, KNOT-CURLEW, TITTEREL (the latter name from its rippling call note).

Length.—16 to 18 inches.

Weight.—14 oz. to 16 oz.*

Markings.—A small CURLEW in appearance and with a bill turned *downwards* exactly like that bird's, but decidedly shorter, even in proportion to the WHIMBREL'S smaller size (see illustration, p. 374). It has, however, a *light-coloured* band down the centre of the *dark brown* head; † whereas the head of the CURLEW is *pale brown*, each feather having a streak of *darker brown*.

Nests.—Sparingly in the Orkneys and Hebrides, and more numerously in the Shetlands; but not on the mainland of Scotland or in any other part of the British Islands.

Abroad, the WHIMBREL breeds freely in the Faröes

* Adult Whimbrel, like Curlew, vary greatly in size and weight, but the respective weights of these two birds never overlap.

† In the immature Whimbrel the streak on the top of the head is in the form of a string of grey spots.

and Iceland; in the north of Norway and Sweden; and locally in Arctic Russia and in Siberia.

The nest of the Whimbrel is placed in similar situations to that of the Curlew. The eggs, though much smaller, are also very like those of the Curlew in colour, but are sometimes *pale brown*, and the markings are generally bolder.

Whimbrel rest on our shores chiefly in the month of May, when on passage to their nesting grounds north of the British Islands (hence the name Maybird); and they visit us again from the last week of July to the end of September, as they migrate southward.

Whimbrel always appear to be far more numerous in the spring than in the autumn migration, especially on the coast of Ireland. The flights of old birds that pass northward to nest *should* be, one would imagine, augmented in number on their return south by the addition of the young of the season, and therefore visit us in greater abundance in September than in May, yet this is not apparently the case.*

I have seen flights of Whimbrel on our coasts as late as the last week of May, and a few old birds journeying southward as early as July 15; but the usual

* This may, no doubt, in some measure be accounted for by the fact that the southward migration of the Whimbrel extends over a *much longer period* than their northward one. Hence in the spring these birds come to us with a rush, and numbers are seen together. In the autumn they do not suddenly appear in large parties, though it is probable more really visit us at that season than in the spring.

migration of WHIMBREL to the north is from the 3rd to the 15th of May, and they return south (the adults arriving first) from the 20th of July to the middle of September.

A few WHIMBREL may be seen here and there on our tidal estuaries throughout the winter, and I have in that season shot them when feeding on the ooze in company with PLOVER, GODWIT, and other shore-birds; but I have rarely seen WHIMBREL intermixed with CURLEW.

I have frequently, when on the moors in August, noticed flights of WHIMBREL passing over high up, as is their custom when migrating, and by means of my pocket field-glass been able to identify them by their small size and curved bills, as well as by the peculiar 'tittering' cry they utter when flying.*

The WHIMBREL, from its close resemblance in form and colour to the CURLEW, is often imagined by coast-fowlers to be the young of that bird.

ESKIMO WHIMBREL

(Also known as the 'ESKIMO CURLEW')

Length.—14 inches.

* A small pair of field-glasses are *invaluable* at *all* seasons of the year to *anyone* who wishes to identify wild birds, or who cares to observe their habits.

A straggler from America that has been obtained on seven or eight occasions in the British Islands.

This bird, though considerably smaller than the COMMON WHIMBREL, is similar to the latter in shape, and has also the same down-curved bill, and pale streak on the top of the head. Its plumage is, however, darker, and it has *no white* on the *lower back* like the COMMON WHIMBREL.

THE COMMON OR BAR-TAILED GODWIT

Local names.—PREEN, CURLEW-WHELP, GODWIN.

Length.—14½ to 16¾ inches.

Weight.—10 oz. to 14 oz.*

Markings.—In summer, the adult male and female have all the under-parts from chin to tail, rich *chestnut red*. The head, hind-neck, and sides of the breast, also *chestnut red*, but streaked with *blackish*. The upper back *blackish-brown* mottled with *reddish*. The long feathers of the wings *black* edged with *white*,

* The smaller birds are *always* the males, the larger the females. The heaviest I ever killed in our Islands weighed 15 oz., and the lightest 7 oz.

The females are less brightly coloured in summer than the males.

the smaller wing-feathers *greyish-white*. The lower back *white* streaked with *brown*.

In winter, the under-parts are *greyish-white*, with a few streaks of *brown* on the front of the neck and breast; the upper plumage *ash grey* streaked with *brownish-grey*.

In summer and till the autumn moult, the tail-feathers of the adult Bar-tailed Godwit are crossed with alternate *yellowish-white* and *dark brown* bars. In winter, the tail is *not* barred, but is a nearly uniform *ash grey*.

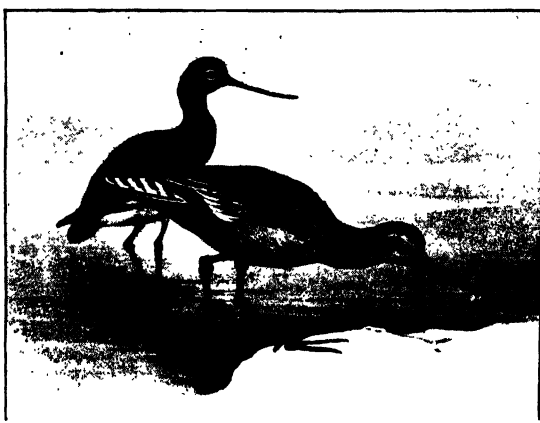
The young birds of the year, when they arrive on our shores in autumn, somewhat resemble the adults in winter, but are *greyish-buff* on the head, neck, breast and back. They are also very distinctly barred on their tail-feathers, markings which they retain throughout their *first* winter. (See p. 392.)

The bill of a male Bar-tailed Godwit measures about 3 inches, and that of a female about 4 inches in length.

Nests.—Has never been known to breed in the British Islands. Eggs of the Bar-tailed Godwit have been obtained on a few occasions in Lapland and Finland, but the chief nesting grounds of this bird are practically undiscovered, though they are *supposed* to be in Northern Russia and Siberia.*

* A Bar-tailed Godwit closely allied to our bird breeds in North-Eastern Siberia.

The adult BAR-TAILED GODWIT like some other wildfowl (as, for instance, the BLACK-NECKED and the RED-NECKED GREBES, the BLACK-THROATED and RED-THROATED DIVERS, and the RED-NECKED PHALAROPE) derives its name from markings that are only present when the bird is in its *summer* plumage.



BLACK-TAILED GODWIT BAR-TAILED GODWIT (Summer plumage)

BAR-TAILED GODWITS are to be seen on the tidal flats of our shallower shores from the middle to the end of May, when on their migration to the northern regions in which they pass the summer. They visit us again, and in much larger numbers, from the

middle of August to the end of October, as they are voyaging south with their young.

The BAR-TAILED GODWIT, though much more numerous in the British Islands in *autumn* than at any other season of the year, is, however, not uncommon throughout the *winter*, on a few parts of the east coasts of England and Scotland, in one or two of which I have occasionally seen a couple of hundred in a gathering in December and January.*

The BAR-TAILED GODWIT, when in breeding plumage with its rich *chestnut red* under-parts, is very handsome. The change from the *grey* hue of winter to the *red* colouring of summer is most irregular as to date, and so is the transition from the summer to the winter dress.

I have seen *immature* BAR-TAILED GODWITS in the second week of May with scarcely a sign of red on the neck or breast; though the *old* birds, in my experience, usually show, even in the first week of May, *some* red on the under-parts, and are often *entirely* red from chin to tail by the middle of that month.

Then in the *first* week of September I have killed

* Mr. Abel Chapman, a most intelligent and observant tradesman of Sunderland in the north of England, has recently written that '*thousands* of Bar-tailed Godwits haunt the coast of Northumberland *throughout the winter*.' This assertion, as I know intimately the locality alluded to, it is well should be corrected. Mr. Chapman has given us some very readable and accurate little sketches of his rambles after wildfowl on our N.E. sea-board, but in this instance, he has, no doubt, mistaken some other species (probably the Knot) for the Godwit.

Bar-tailed Godwit with their under-parts almost as red as in summer, and in the *last* week of that month others that had attained the complete *grey* and *white* plumage of winter.

N.B.—Young Godwits shot in autumn, if served on toast like Snipe, make one of the *best* dishes possible for the table.

Select for cooking the birds that are most washed on the back and breast with *greyish-buff*, and which also have broad *brown* and *white* bars on their tail-feathers; *these* will be the young of the year, and hence more delicate in flavour than the adults.

THE BLACK-TAILED GODWIT

Length.—16 to 19 inches.

Weight.—14 oz. to 16 oz. (Female larger than the male, and less brightly coloured in summer.)

Markings.—Similar in shape and habits, and in many respects in plumage (especially in winter), to the Bar-tailed Godwit, but considerably *larger*.

The Black-tailed Godwit may be distinguished at *all ages* and *seasons* from the Bar-tailed Godwit (1) by the *white* bar on each wing; (2) by its having the

terminal two-thirds of the tail *black*, without any sign of the *white* and *brown* bars of summer and early autumn, or the plain *ash-grey* colour of winter, which are characteristic of the tail of the other GODWIT.*

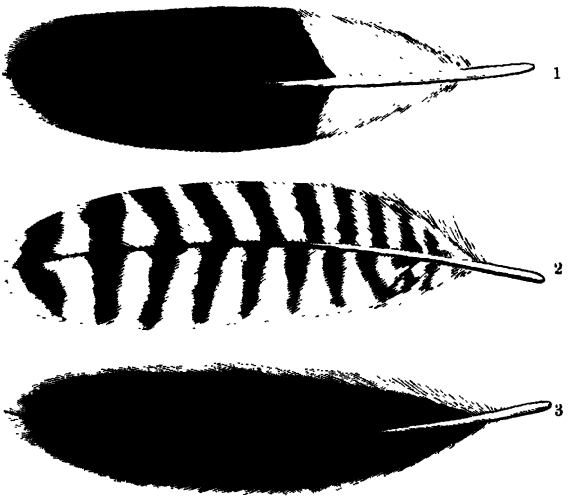
In summer, the BLACK-TAILED GODWIT has the head, neck, breast, and upper back, *reddish-brown*; and is streaked on the head and neck, barred on the breast, and mottled on the back, with *blackish*. The chin, abdomen, and below the tail, *white*. (The BAR-TAILED GODWIT in the nesting plumage is entirely and uniformly *red* underneath without any *white*.) In *winter*, the BLACK-TAILED is superficially not unlike the BAR-TAILED GODWIT at the same season. The *long* legs and bill, *white* wing-bar, and the amount of *black* on the tail-feathers of the BLACK-TAILED GODWIT, are, however, constant marks of distinction.

Nests.—The BLACK-TAILED GODWIT breeds in Belgium, Holland, Denmark, Northern Germany, Iceland, and Southern Scandinavia; in parts of Russia, Western Siberia, and Central Asia; and freely on the marshes of the river Vistula in the south of Poland.

The nest is placed in rough herbage, usually in

* The bill of the male Black-tailed Godwit is about 4 inches in length, that of the female 5 inches. The Black-tailed Godwit is a very long-legged bird; the leg joint from the knee (really the heel) to the toes measures 3 inches, this part in the Bar-tailed Godwit being only 2 inches long.

marshy ground or near water. It is a mere hollow lined with dry grass, and contains four pale *olive green* eggs with *brown* spots.



1. Tail-feather of Black-tailed Godwit (adult or young, summer and winter).
2. Tail-feather of Bar-tailed Godwit (adult in summer, or young bird in its *first* autumn and winter).
3. Tail-feather of Bar-tailed Godwit (adult in winter).
(all natural size)

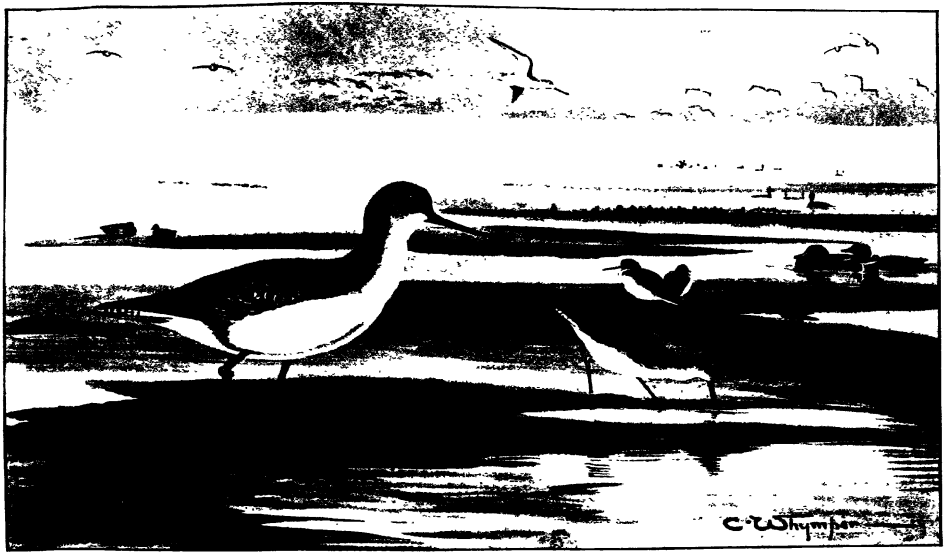
The BLACK-TAILED GODWIT is an uncommon, indeed almost a *rare*, bird with us. It merely rests on our shores in small numbers when migrating northward in spring, and again when passing to the southward in autumn after nesting, and though I have seen a few

in May and September on both our east and west coasts (rarely in Ireland), I have never killed or observed *one* of these birds in *winter*.

The BLACK-TAILED GODWIT was at one time common in the east of England as a summer visitor, but for nearly fifty years past none have been known to nest in the British Islands.

No doubt the much-abused, and often deservedly so, egg-seekers and trophy-hunters have, to a great extent, brought about this scarcity. It should, however, be remembered that after the natural breeding haunts of the BLACK-TAILED GODWIT, and other now scarce marsh birds, were taken from them (as when the fens of East Anglia were turned into cornfields), they were not likely to resort in future to such altered ground to nest, whatever the protection afforded them.

NOTE.—The bills of both the GODWITS are slightly upturned.



GREENSHANK

LETTER XXXII

*GREENSHANK, REDSHANK, SPOTTED REDSHANK, YELLOWSHANK, AND SANDERLING**

THE GREENSHANK

Length.—13 to 14 inches.

Weight.—8 oz. to 10 oz.

Markings.—The legs and toes of the adults are *olive green* (hence the name). The bill *black*, a little inclined *upwards* (like a GODWIT'S), and 2¼ inches in length.

The tail-feathers are *white*, chequered and crossed with bars of *pale brown* (in the REDSHANK these bars are much more conspicuous and nearly *black*—compare pp. 394–7).

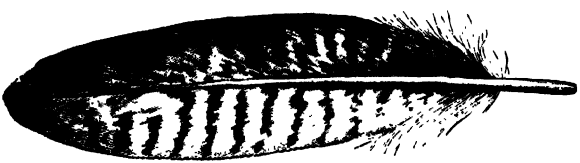
In summer, the head and hind-neck are *greyish-white* streaked with *blackish*. The upper back *blackish*, the feathers edged with *pale grey*. The lower back *white*. The fore-neck, breast, and flanks, *white*, spotted and streaked with *blackish*. In winter, the upper-parts

* Males and females of these birds are similar in plumage.

are *greyer*, and all the under-parts are pure *white*. The young birds in autumn have the feathers of the upper back edged with *buff*; the neck and sides of the breast streaked with *dusky*.

The GREENSHANK is fully a third larger than the REDSHANK.

Nests.—Sparingly in the Highlands and certain western isles of Scotland, though not elsewhere in the British Islands.*



FEATHER (natural size) FROM TAIL OF GREENSHANK

Abroad, the GREENSHANK breeds in Norway, Sweden, Lapland, Northern Russia, and Siberia; but not, like the REDSHANK, in Central and Southern Europe.

The GREENSHANK nests on the ground, usually in the vicinity of fresh-water, and lays four beautiful *buff-coloured* eggs, which are spotted with *reddish-brown* and blotched with *bluish-grey*.

Away from its breeding haunts, the GREENSHANK is

* Chiefly in Perthshire, Inverness, Ross, Sutherland, and Caithness; also in smaller numbers on the Outer Hebrides and in Skye.

rather uncommon in the British Islands; it visits our coasts and inland waters when migrating to the north of us in April and May, and again as it returns southward in August and September.

These birds are not nearly so scarce in Ireland as they are in England, Scotland, and Wales. On the western shores of Ireland I have occasionally seen Greenshanks in the spring and autumn in little groups of three to five. They are easy to distinguish from the Redshanks, the Plovers, and the smaller shore-birds, by reason of their height and bulk, and the length and colour of their legs.

I have shot a few Greenshanks during the winter in Scotland and Ireland, but in England and Wales they are seldom obtained save in the autumn and spring.

THE COMMON REDSHANK

Local names.—Red-leg, Pool Snipe, Shore Snipe, Teuke (from its call).

Length.—10 to 11 inches.

Weight.—5 oz. to 6 oz.

Markings.—The legs and toes of the adults are *orange red* (hence the name), those of the young birds *dull yellow*. The bill *orange red* at the base to *black* at the tip, 1½ inch in length, and straight.

At *all* ages and seasons the feathers of the lower part of the back are *white*; those above the tail barred with *blackish*. The tail *white*, also barred with *blackish*, its central feathers washed with *grey* (see opposite page).

In summer, the chin, throat, front of the neck,

REDSHANK (Summer plumage)

breast, and flanks, are closely streaked and spotted with *blackish-brown*. The upper-parts *greyish-brown*; the head streaked and the back barred, with *blackish-brown*. In winter, all the under-parts from chin to tail are *white*, slightly streaked with *greyish-brown* on the neck and breast. The upper-surface *deep grey*

washed with *olive brown* on the back, which is then slightly barred with *blackish*.*

Nests.—The REDSHANK breeds in many parts of the British Islands that contain marsh and low-lying wet moors and grass-lands suitable for it to feed on when nesting, or to resort to, for a time, after its young are hatched.

In Wales the REDSHANK nests sparingly; but in Ireland and Scotland I have seen it during the summer, both on high and low ground, in considerable numbers near the shallow waters and on the wet moorlands

FEATHER (natural size) FROM TAIL OF REDSHANK

that are common to those countries, as well as round the shores of the large lakes.†

Abroad, the REDSHANK breeds in Iceland, the

* When on wing the Redshank shows a considerable amount of white, for, in addition to the parts mentioned above as being that colour, the innermost wing-feathers are also white.

† The Redshanks that pass the summer with us leave the sea-shore for their inland breeding quarters about the second week of March, and return to the vicinity of the tide with their young during August and September.

The Redshanks that nest in more northern countries may be seen resting on our coasts as late as the first week of May, or long after our home-breeding birds have commenced nidification.

Faröes; throughout Europe from north to south; in parts of Asia; and in Northern Africa.

The nest is commonly placed in the centre of a tuft of long, coarse herbage, growing in or near moist ground, and is a depression lined with dry grass. The eggs are four in number, and are *dull buff* in colour, spotted and blotched with *dark reddish-brown*.

Though so many REDSHANKS nest with us, yet the home-breeding birds and their young bear a small proportion to the migrants from abroad that arrive on our sea-board in the autumn.

REDSHANKS are more or less plentiful on all the tidal estuaries of the British Islands during winter, if these offer them ooze-banks to feed on at low-water, and rocks, small islands, and stretches of shingle to rest on at high-water.

REDSHANKS are often alluded to as if they collected in numbers. I have, however, *never* seen fifty together in *one* gathering, abundantly as they are dispersed along the coasts of our Islands in autumn, winter, and spring. From the beginning of September to the middle of April, single birds in plenty, and many little trips of from three to five, may be noticed wherever flats of sand and mud are exposed by the ebb-tide on our shallow shores. I abhor the very sight of this noisy, restless, aggravating bird, for many a fine shot has it spoiled for me (as if purposely)

by suddenly rising with its clamorous notes just as I was stealing nicely up within gun-range of ducks and geese. The warning cry of the REDSHANK will startle on wing even TEAL when fast asleep in a hard frost.*

THE SPOTTED OR DUSKY REDSHANK

Length.—12 to 13 inches (larger than the COMMON REDSHANK).

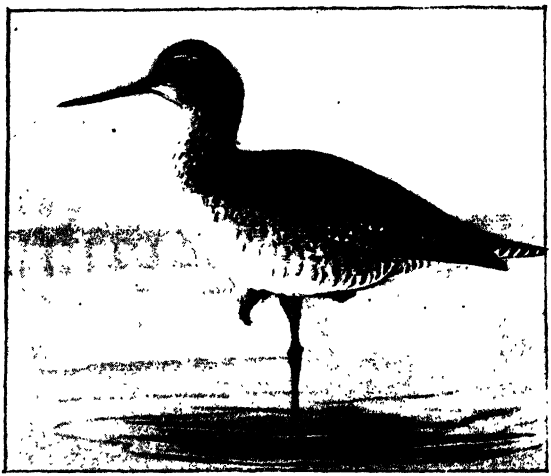
Weight.—6 oz. to 7 oz.

Markings.—The legs and toes of the adults are *bright red* in *winter* and *reddish-brown* in *summer*. The bill *black*, straight, and 2¼ inches in length, its base *orange red* in winter, and *dull red* in summer.

The SPOTTED REDSHANK, when in *winter* plumage, greatly resembles the COMMON REDSHANK, but its bill and legs are a good deal longer than are those of the latter bird. The central tail-feathers of the SPOTTED REDSHANK are plain *ash grey*, not *white* washed with

* The Curlew is bad enough at times as a 'spoil sport' to the fowler, though this bird usually rises at some distance. The rascally Redshank will wait on the edge of the water, nodding its head and flirting its tail, till you are *almost* within firing range. He will then spring on wing with his disturbing cry, and probably destroy thereby all chance of a shot at the Ducks or Geese you have, perhaps, been patiently stalking for an hour or more.

grey and barred with *black* as in the Common Redshank. It may also always be known by having the inner flight-feathers of the wings *white*, much barred with *dusky*; these same feathers in the Common Redshank being nearly *pure white*. The smaller wing-feathers are conspicuously spotted with *white*, and the feathers



Spotted Redshank (Winter plumage)

of the lower back are more heavily barred with *black* and *white* than in the Common Redshank.

In summer, the general plumage of the Spotted Redshank is *deep black*, washed with *brown* on the upper back and wings, which have small flecks and

spots of *white*. The lower back is *white*, barred with *black* above the tail.

Nests.—The SPOTTED REDSHANK breeds north of the Arctic Circle, in Norway, Sweden, Lapland, Finland, Russia, and Siberia. The nesting habits of this bird are similar to those of the COMMON REDSHANK, but it usually selects drier situations for the site of its nest.

The eggs are larger than those of the COMMON REDSHANK, and are more variable in colour, some of the varieties being extremely beautiful.

The SPOTTED REDSHANK is a somewhat *rare* migrant that we obtain when on its passage to the north in the spring, and again in the autumn on its voyage southwards.*

I have only once seen a SPOTTED REDSHANK that was killed in the British Islands in winter.

As this bird in its summer 'suit of black' is unmistakable, I give a sketch of it in *winter* feather, which shows the triangular *white* spots that are always more or less present on the smaller wing-feathers, and from which it derives one of its names.

* The SPOTTED REDSHANK occurs in our Islands more frequently in autumn than in spring, and immature birds in their brown, and much spotted upper plumage, are less rare than adults.

THE YELLOWSHANK

A straggler from America, that has been obtained on two occasions in the British Islands. (In Nottinghamshire about forty years ago, and in Cornwall in 1871.)

It obtains its name from the bright *yellow* colour of the legs of the adult bird.

THE SANDERLING

Local name.—SAND RUNNER.

Length.—7½ to 8 inches.

Weight.—2¾ oz. to 3¼ oz.

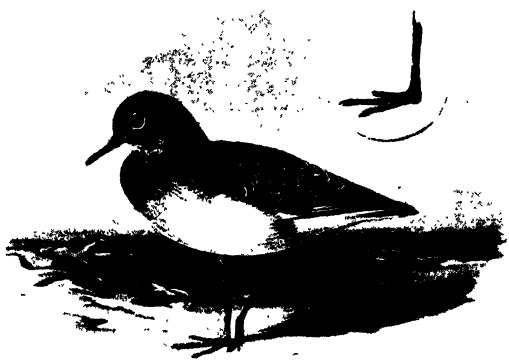
Markings.—The SANDERLING has no hind toe, and this peculiarity is *alone* sufficient to distinguish it from *any* of the small shore-birds—such as the DUNLIN, which it resembles in size, and with which it often associates.

The legs and bill *black*, the latter an inch in length.

In winter, the plumage of the adult SANDERLING on the upper surface of the head and body is chiefly

a delicate shade of *pale ash grey*. The under-parts from chin to tail *pure white*.

In summer, the adults have the feathers of the back marked with *pale chestnut* and *black*, and tipped with *grey*. The head, neck, breast, and sides, *greyish-red*, streaked with *dusky*. The remainder of the under-surface *white*.



SANDERLING (Winter plumage)

In early autumn, the young, which are then more numerous on our shores than the adults, have the crown of the head, and the upper-part and sides of the back, *black*, prettily spotted with *white* and *pale buff*. The under-parts *white*, slightly tinged with *buff* on the breast and sides of the neck.

The adult gradually sheds the *chestnut* in autumn,

with the result that the back becomes mostly *black* during the transition of the bird from its summer to its *grey* plumage of winter.

Nests.—The SANDERLING is supposed to breed on most of the islands and countries of Europe, Asia, and America, that are within the Arctic Circle.

A few eggs of the SANDERLING have been obtained in Iceland; in Arctic America (Grinnell Land and near Anderson's River); and in Greenland; but in Europe and Asia the eggs of the SANDERLING have not been found.

The eggs are *greenish* in colour, and spotted with *brown*.

Though the SANDERLING is somewhat uncommon on our coasts in winter, except in Ireland, it is, however, abundant in the autumn, when returning from its Arctic breeding grounds.

I have killed SANDERLINGS at the end of August, with the mottled upper plumage of the breeding season still showing to a great extent; and I have also occasionally noticed these birds on the tidal banks and rocks as late as the last week of May, when on their way north, in their complete nesting costume.

SANDERLINGS frequent the flats of sand and shingle near the sea, and in winter intermix with DUNLIN,

Ringed Plover, and other shore-birds, but in autumn they usually keep in small parties to themselves.

The Sanderling is slightly larger than the Dunlin, and at a short distance, especially in winter, its plumage shows almost white in contrast to that of the various small species in whose company it may be seen on the tidal banks.

The colouring of the Sanderling in winter is not unlike that of the Grey Phalarope at the same season, or one of the pale-mantled seagulls.

LETTER XXXIII

SANDPIPERS *

COMMON SANDPIPER

Local names.—SUMMER SNIPE.

Length.—7½ to 8 inches.

Weight.—2¾ oz. to 3½ oz.

Markings.—In summer, the adults have the upper-surface glossy *greenish-brown*, finely striped and barred with *dark brown*; the chin and throat *white*, streaked with *greyish-brown*; breast *greyish-brown*; the rest of the under-parts *white*. The inner, or smaller, flight-feathers are *brown*, with *white* bases and tips.

The young, in autumn, resemble the adults, but are not so glossy on the back, where the feathers are edged with *black* and *buff*.

The legs and toes *greenish-grey*; the bill *dusky*.

* Males and females similar in plumage.

Nests.—The COMMON SANDPIPER breeds rather freely in Scotland and in the north of England, where it is generally distributed during the nesting season; sparingly in south-western England; and in considerable numbers in Ireland and Wales.

COMMON SANDPIPER (Summer plumage)

In the eastern counties of England south of the Humber this bird does not nest, and is only observed therein as an autumn and spring migrant.

Abroad, the COMMON SANDPIPER nests throughout Europe, south of the Arctic Circle; and in Asia in Southern Siberia and the Himalayas.

The nest is a hollow usually scraped in the slope of some dry bank near water, often among bracken or heather, and is lined with scraps of dry herbage. The eggs are four in number, and of a deep *buff* ground-colour spotted with *reddish-brown*.

The COMMON SANDPIPER is well known to the trout angler in most parts of our Islands, for it frequents in summer the limpid, swift-running, brooks and rivers that are fringed with shingle and sand; it may also be seen on the gravel-strewn shores of

A CENTRAL TAIL-FEATHER OF THE COMMON SANDPIPER (natural size)

clear fresh-water lakes and pools, especially those in mountainous districts. In Scotland these birds nest on well-nigh every river and loch from the Pentland Firth to the banks of the Tweed. I have seen the COMMON SANDPIPER on most of our rapid streams in summer, not of course in numbers, but scattered here and there along the edge of the water.

The COMMON SANDPIPER when met with on our rivers and lakes flies away with twittering cry and quivering wings, but it soon alights, and at once commences to nod its head and jerk its tail, as if possessed of St. Vitus himself.

The deep sluggish rivers and the reed-surrounded meres of our eastern counties have no attraction for the COMMON SANDPIPER as nesting resorts, for this bird delights in flitting from stone to stone in mid-stream, and in running about the pebbly margins of rippling waters in search of insects and other aquatic life.

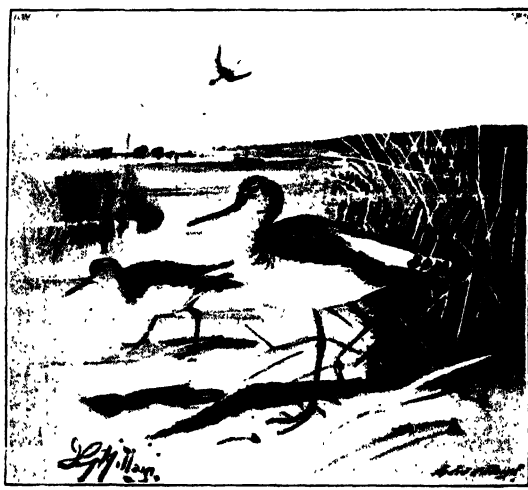
COMMON SANDPIPERS are very rarely seen in our Islands after the middle of October, whence to the end of April they dwell in warmer countries, and during this period are absent from the British Islands.

Usually between the 20th and 25th of April, COMMON SANDPIPERS suddenly arrive in their breeding haunts on our lochs and rivers, to which, as they are not much seen on the coast, they apparently fly direct. In the eastern counties of England, where the bird does not nest, it appears in small numbers about the first week of May and remains during the greater part of that month. These late visitors no doubt voyage to the north, for our home-breeding birds have a fortnight previous to the middle of May settled down in their summer haunts.

I have observed COMMON SANDPIPERS with their young on our tidal estuaries during the last week of July in groups of five or six. These leave by the middle of September on their southward migration, and are usually replaced in the first few days of October by small flights of birds that, presumably, come from

abroad, some of which frequent the low-lying shores of our coasts till about the second week of that month.

GREEN SANDPIPER



COMMON SANDPIPER GREEN SANDPIPER (Summer plumage)

Local names.—SUMMER SNIPE (a general name for this bird and the preceding), WHISTLING SNIPE, WHITE-TAILED SNIPE.

Length.—9 to 9½ inches.

Weight. 3½ oz. to 3¾ oz.

Markings.—Is the *largest* of the British 'SANDPIPERS.' The adults, in summer, have the upper-part of the head and the back of the neck, *brownish-grey*. The upper back and wings (except the flight-feathers, which are *blackish*) *dark brown*, glossed with *green* and marked with small *whitish* spots. The lower back *white*. The sides of the head and neck, and the centre of the breast, *whitish* streaked with *dusky*.* The sides of the breast *greyish-brown*. The chin, throat, and abdomen, *white*.

The feathers of the tail are chiefly *white*, the four central ones being crossed with three or four broad *blackish bars* on their terminal halves, the others having each one or two dark spots or bars near their tips (see next page).

The bill nearly *black* and 1⅜ inch in length. The legs and toes *greyish-green*.

Nests.—*Supposed* to occasionally nest in the British Islands, but has not been *proved* to do so. Abroad, the GREEN SANDPIPER breeds in Southern Norway and Sweden; in North Germany; in Central and Northern Russia; and in Southern Siberia and Central Asia.

* In winter, the head and neck are not streaked as in summer, and the white spots on the back are smaller.

The GREEN SANDPIPER, strange to relate, nests in trees, often at a height of many feet from the ground, utilising some disused birds' nest, or even a squirrel's drey, in which to rear its young.

The 'GREEN,' though not nearly so numerous as the COMMON SANDPIPER, is a not very uncommon visitor to us in the spring and autumn. I have met with this bird at *all* times of the year, except

A CENTRAL TAIL-FEATHER OF THE GREEN ♀
(natural size)

in June and July, but much oftener in May and September than in other months.

To a casual observer the resemblance of the GREEN SANDPIPER in shape and habits to the COMMON SANDPIPER, no doubt, often causes it to be overlooked when voyaging in April and May to Northern Europe to nest, and again on its return in August and September. At these periods it frequents the same localities as the more common species. I have seen the GREEN SANDPIPER in the vicinity of many of the fresh-water lakes, streams, and ditches of the north of England, Wales, and of the east of Scotland. It is a shy bird, and as it rises utters a loud wild note.

In the west of Ireland the GREEN SANDPIPER is very seldom killed, but in the south and east it is not scarce in autumn.

I have rarely obtained a GREEN SANDPIPER on a tidal estuary.

WOOD SANDPIPER

Length.—8 to 8½ inches.

Weight.—2½ oz. to 2¾ oz.

Markings.—The adult is decidedly smaller than the GREEN SANDPIPER and has longer legs, but is otherwise somewhat similar in form and colouring, especially as *both* birds have the back and wings sprinkled with *whitish* spots.*

You may know the WOOD SANDPIPER from the GREEN SANDPIPER by the central feathers of its tail being entirely *covered* with alternate bars of *brown* and *white* (see next page).

(The GREEN SANDPIPER has the central tail-feathers *white* on their basal halves, and *only* barred with *black* and *white* on their *terminal* halves.)

Another mark of distinction is that this bird has the *shaft* of the outer flight-feather of each wing *white*,

* The white spots on this bird are larger than those on the feathers of the Green Sandpiper.

the GREEN SANDPIPER having the shafts of these feathers *brown* (see opposite page).

Nests.—Has only on *one* occasion been *proved* to nest in the British Islands (Northumberland, 1853). Abroad, the WOOD SANDPIPER breeds very generally in

A CENTRAL TAIL-FEATHER OF THE WOOD SANDPIPER (natural size)

Northern and Central Europe; and across Asia to China.

The WOOD SANDPIPER is a somewhat *rare* bird in England and Wales, is still more rare in Scotland, and has but once been obtained in Ireland (Wicklow, 1885).*

It is occasionally recorded from the east side of England in April and May when migrating to those of its nesting haunts that are north of the British Islands, and it visits us again in August and September as it returns southward, but does not occur in winter.

* It is a misnomer to call this bird the *Wood* Sandpiper, as it never nests in trees like the Green Sandpiper, to which the name should belong.

1. OUTER FLIGHT-FEATHER FROM THE WING OF A GREEN SANDPIPER (dark shaft)
2. OUTER FLIGHT-FEATHER FROM THE WING OF A WOOD SANDPIPER (white shaft)
(natural size)

PURPLE SANDPIPER

Local name.—ROCK SANDPIPER.

Length.—8 to 8¼ inches.

Weight.—2¾ oz. to 3¼ oz.

Markings.—The adults, in summer, have the top of the head *dusky*, streaked with *dull buff*; upper part and sides of the back, *glossy purplish-black*, marked with *buff*, *chestnut*, and *white*.

The lower back and the long central tail-feathers, *brownish-black*. The fore-neck *white* streaked with *dusky*; breast *pale greyish* spotted with *darker grey*;

abdomen *white*; flanks spotted with *dusky-grey*. The main flight-feathers *black* with *white* shafts.

In winter, the upper-surface is *sooty-black* glossed with *purple*; the feathers of the upper-part and sides of the back, and the smaller wing-feathers, edged with

PURPLE SANDPIPER KNOT (Summer plumage)

leaden-grey. The fore-neck and breast *brownish-leaden-grey*, the feathers of the lower breast edged with *white*; the remaining under-parts *white*, streaked on the sides and under the tail with *grey*.*

* The young are dusky on the upper-surface; the feathers of the back, and the smaller wing-feathers, edged with pale greyish-buff.

The legs dull *yellow*. The bill *brown*, but *yellowish* at the base, and from 1¼ in. to 1½ in. in length.

The more central tail-feathers of the PURPLE SANDPIPER are plain *brownish-black*, the others plain *ash brown*.

The *dark* colouring of the PURPLE SANDPIPER, its

A CENTRAL TAIL FEATHER OF THE PURPLE SANDPIPER (natural size)

squat figure, and *short yellow* legs, are sufficient to distinguish it in winter or summer from all other SANDPIPERS.

Nests.—*Supposed* to occasionally nest on the islands of the north of Scotland, but not *proved* to do so. Abroad, the PURPLE SANDPIPER breeds in the Faröe Islands, Iceland, Norway, Greenland, Spitzbergen, Novaya-Zemlya; and in Arctic Asia and America.

The nest is placed on the ground, sometimes near the sea and sometimes on the fells, and consists of a hollow lined with various dry vegetable matter. The eggs are four in number; of a *greenish* or a *buff* ground-colour, marked with *reddish-brown* and *purplish-grey*.

Flights of PURPLE SANDPIPERS arrive on our coasts from the middle of September to the end of October. The majority pass the winter with us, and then leave again for their more northern breeding haunts in April and May.

They are fairly common in autumn and winter on parts of the sea-board of the British Islands, but I have observed many more of these birds in winter on the western shores of Ireland and Scotland than on any other portion of our coast.

PURPLE SANDPIPERS frequent the rocky and pebble-strewn beaches that fringe the sea-shore. They find their food, such as sand-hoppers and other marine creatures, under the small stones and among the drift and sea-weed near high-water mark.*

I have seldom seen PURPLE SANDPIPERS associating with REDSHANKS, DUNLIN, or RINGED PLOVER, on the bare tidal flats at a distance from the land; but I have often found them running about the rocks and shingle in company with TURNSTONES, which they much resemble in the selection of their feeding-grounds.†

* I have often seen Purple Sandpipers busily feeding on the rock or sand left bare for but a few moments by a receding wave, and cleverly evading the next advancing surge by springing on wing just as it was about to overwhelm them. The attraction is the number of small marine animals to be found immediately the tide commences to recede.

† At a short distance the Purple Sandpiper is not unlike the Turnstone when both birds are in winter plumage. You may distinguish the Turnstone by its slightly *larger size*, its *short strong bill*, *white lower back*, and the uniformly *snowy whiteness* of all its under-parts below the breast.

CURLEW SANDPIPER OR PIGMY CURLEW

Local name.—LITTLE JACK CURLEW.

Length.—7½ to 8 inches. (A fine long-billed specimen 8½ inches.)

Weight.—2¼ oz. to 2¾ oz.

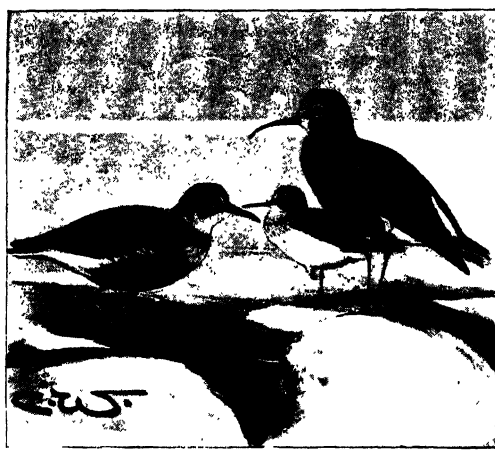
Markings.— Can be instantly recognised by its bill, which is slightly *down-curved* towards the tip (hence the name CURLEW SANDPIPER), and totally different from the nearly straight bills of the other SANDPIPERS.

In *size*, and in the curve and length of its bill, the CURLEW SANDPIPER resembles the DUNLIN, but its legs are considerably *longer*.*

In summer, the adult has the head, neck, and back, *chestnut*, broadly streaked with *black*. The smaller feathers of the wings *ash grey* margined with *dull white*. The long feathers of the wings *brown*. The underparts from chin to tail a nearly uniform rich *chestnut red*. The feathers over the base of the tail *white*, conspicuously barred with *black*.

* A young Curlew Sandpiper has a decidedly longer and more curved bill than a young Dunlin; but in the adults of both species the bill in these respects is very similar, the advantage, however, both in length and curve being with the Curlew Sandpiper.

In winter, the upper-parts are *ash brown*, streaked on the top of the head and back of the neck with a darker shade and having the feathers of the back and the smaller wing-feathers edged with *white*. The under-parts from chin to tail *white*. The lower back and above the tail *white*.



Little Stint (Summer plumages) CURLEW SANDPIPER

The *young* birds in their first autumn, which are by far the most often met with in our islands, have the top of the head and hind-neck *greyish-brown*. The feathers of the upper-parts of the body *greyish-black*, darker towards their margins and edged with *white*

and *buffy-white*. The fore-part of the neck and the flanks *brownish-buff*.

The legs and toes of the CURLEW SANDPIPER are *black*, shaded with *green*. The bill *black*, and 1⅞ inch in length.

Nests.—The eggs of the CURLEW SANDPIPER have *never* been obtained, and its breeding haunts are quite *unknown*, but are probably in Arctic Asia. Between spring and autumn this little bird is only absent from the British Islands for some three months, yet within that short period it not only flies a vast distance to some unexplored Arctic Regions to nest, but also returns with its full-grown young. The CURLEW SANDPIPER is indeed a great traveller, for it winters as far south as Cape Colony and Tasmania.

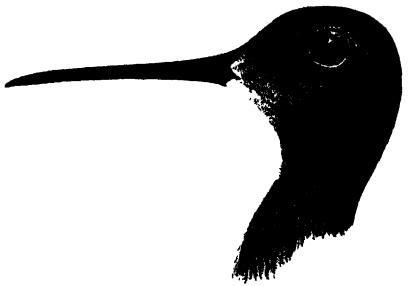
The CURLEW SANDPIPER, in most seasons, is 'fairly common' on certain parts of our eastern sea-board in autumn. I have seen it in August,* September, and October, on many portions of our coast, the western sea-board of Ireland and Scotland excepted, in little groups of three to five, or else intermixed with DUNLIN and RINGED PLOVER.

In the winter months I have never noticed or shot

* Though this bird is rarely seen during summer in the British Islands, it is, however, often obtained therein very early in the autumn in its red nesting plumage, which much resembles that of the Knot.

a CURLEW SANDPIPER in the British Islands, or even heard of one being obtained.*

If feeding with DUNLIN, its most frequent associate, the CURLEW SANDPIPER may be known (with the aid of a field-glass) by its superior *height*; and if flying with these birds by the *white* that at *all* seasons shows to a greater or less extent on the lower back just above the tail, this part in the DUNLIN being always *dark*.



HEAD OF CURLEW SANDPIPER (showing form of bill)
(natural size)

I have no doubt the CURLEW SANDPIPER is more numerous in our Islands than supposed, for it frequents the company of other small waders that in the late

* Curlew Sandpipers appear again on our shores, and occasionally inland, in April and May when on their migration northward to their nesting quarters, wherever these may be. I once killed a Curlew Sandpiper on March 20th, an unusually early date. They are not, however, nearly so often observed in the British Islands in the spring as in the autumn.

autumn it resembles in size, shape, and colour, and which are not usually sought by the fowler.

The following Sandpipers you are not likely to see in the British Islands, but I allude to them because they *have* been obtained therein.

BONAPARTE'S SANDPIPER

A straggler from America, that has been recorded on about a dozen occasions in the British Islands.

PECTORAL SANDPIPER

A straggler from America, that has been recorded about thirty times in the British Islands.

BROAD-BILLED SANDPIPER

A straggler, that has been recorded on about six or seven occasions in the British Islands, though it nests as near to us as Norway and Sweden.

BUFF-BREASTED SANDPIPER

A straggler from America, that has been recorded about a score times in the British Islands.

BARTRAM'S SANDPIPER

A straggler from America, that has been recorded on seven or eight occasions in the British Islands. This bird is much larger than any other 'SANDPIPER' that is common to, or as a chance wanderer visits, our shores.

SOLITARY SANDPIPER

A straggler from America, that has been obtained on only three occasions in the British Islands.

LETTER XXXIV

DUNLIN, KNOT, STINTS AND RUFF *

DUNLIN

Local names.—Ox Bird (usually pronounced Oxey Bird), Sand Snipe, Sea Snipe, Sea-lark, Mud-lark, Purre (an old-fashioned name was Plover's Page, and arose from the Dunlin so frequently associating with the Golden Plover in the breeding season). Sometimes miscalled a 'Stint.'

Weight.—2 oz. to 2⅛ oz.

Length.—7½ to 8 inches.

Markings.—The adults, in summer, have the crown of the head *reddish-brown* and *black*; the feathers of the upper part and sides of the back *black*, edged and marked with *chestnut*; the lower back *dusky*. The throat and upper breast dull *greyish-white*, much

* The males and females of the Dunlin, the Knot, and the Stints are similar in plumage.

streaked with *dusky*. The lower breast conspicuously *black*, the abdomen and below the tail, *white*.

In winter, the adults have the upper-parts and breast plain *ash grey* or *brownish-grey*, slightly streaked on the head and hind-neck with *dusky*; the lower back *dusky grey*. The chin, throat, and abdomen, *white*; the neck and breast, and sometimes the flanks, indistinctly streaked with *greyish*.

The *young* birds in autumn and winter have the feathers of the back, and the lesser wing-feathers, *black* and *dark brown*, edged with *rufous* or *buff*; the top of the head *pale reddish-brown*, streaked with *blackish*. The under-parts *white*, with *dusky* spots on the neck and breast.

The bill, legs, and toes, *black*. The bill *slightly turned downwards* towards the tip (like a CURLEW-SANDPIPER'S), and from $1\frac{1}{8}$ in. to $1\frac{3}{8}$ in. in length.

Nests.—Sparingly on the moorlands of the south-west and the north of England, and in small numbers in the north-west of Ireland, and in Wales.

Rather freely in parts of Scotland, especially near the west coast and in the Hebrides. I have seen DUNLIN nesting near the shores of many of the Scotch rivers and lochs that are fringed by coarse grass and short heather, as well as on high moorlands; for, like the CURLEW and GOLDEN PLOVER, the latter are favourite resorts of the DUNLIN in the breeding season.

In the counties that do not contain wild tracts of heather, such as those in the east of England, south of the Humber, the Dunlin does not nest, though its eggs have on *one* occasion been found in Lincolnshire.

Abroad, the Dunlin breeds in Denmark, Iceland, and the Faröe Islands; in Northern Germany; and in the northern regions of Europe, Asia, and America.

The nest is placed in a tuft of grass or thin heather, and is a mere depression lined with dry grasses. The eggs are four in number and resemble those of the Snipe, but are only about half the size.

The Dunlin that nest with us are insignificant in number, when compared with the vast congregations of these birds that arrive in the autumn to pass the winter in the British Islands.

Great flights of Dunlin usually reach our coasts about the middle of August, and leave us again for more northern regions near the middle of April, but a cold spring, with north and east winds, will cause many of the birds to delay their departure till the first week of May.*

We have no wildfowl, whether Geese, Ducks, Plover or waders, that visit us in *nearly* such abundance as the Dunlin; there is scarcely a bank of ooze,

* I have occasionally seen flights of Dunlin arriving on the coast as early as the 20th of July. There are always a few non-breeding Dunlin about our tidal estuaries throughout the summer.

or a stretch of sand or shingle, round the shores of the British Islands that is not more or less frequented by these birds throughout the autumn, winter, and spring.

To give you an idea of how numerous DUNLIN are, I may safely assert I know fully a *hundred* separate localities on our sea-board, in *each* of which at least two to three thousand DUNLIN may be seen at any time during the winter, and between one such haunt and the next they are also distributed here and there in small numbers, if the ebb-tide exposes banks of mud and sand.

The evolutions of several thousand DUNLIN as they fly against a dark background are beautiful to behold. First they appear like a drifting shadow, then in one moment the sky is bright with innumerable flecks of silver, like a shower of new shillings, as the birds turn their gleaming white under-parts towards the spectator. The next instant they perhaps with one accord reverse their position, and from the grey shade of their backs and wings they then present the aspect of a heavy cloud passing along the horizon.

The swishing noise caused by the rapid flight and quick-beating wings of this little wader is astonishing; even a few score darting by will create a sound like the whistle of a gale through the rigging of a vessel, and many hundred sweeping past in close rank suggest the rush of a storm among the trees of a forest.

The habit of the DUNLIN is to feed at low-water on the soft edges of the creeks and channels that

intersect the mud-flats of an estuary. They will remain in such places till they are forced to retire to the rocks, islands, and promontories, as their favourite spots for obtaining food are one by one covered by the 'flood,' and these they are so loth to quit that they often will not do so until actually washed off their legs by the rising tide. DUNLIN are incessantly on the move, running briskly over the sand and ooze, probing the surface for small marine animals, and so intent are they in their search for food that they will at times allow an approach within an oar's length.*

When poling up a narrow channel in a fowling-punt to GEESE and DUCKS, my attention has frequently been riveted by the nimble and graceful actions of the DUNLIN, that, within a few feet of me, were scurrying about the verge of the tide, many of them breast deep in the water, and others even swimming.

I could on many occasions have killed two hundred DUNLIN at one shot from my stanchion-gun, but I have never yet fired at these birds save when in pursuit of a few specimens with a 12-bore, for they are merry, harmless little sprites, and *not* worth powder and shot. Their very tameness should be their safeguard from injury by the gentleman-gunner.†

* It sometimes happens that a Dunlin meets with a strange end. I have one in my collection which I picked up starved on the beach with its bill securely held between the valves of a small cockle.

† It is another matter with the poor fowler, for *he* can obtain a

KNOT. (See p. 416.)

Local names.—Red Sandpiper, Knot Plover.

Length.—9½ to 10 inches.

Weight.—5½ oz. to 6 oz.

Markings.—The adults, in summer, have the crown of the head *pale reddish-brown*, with *blackish* streaks; the feathers of the upper part and sides of the back, *blackish*, spotted and barred with *chestnut* and *buff*. The lower back and above the tail, *white*, irregularly barred and spotted with *dusky*. A stripe over the eye, the cheeks, and the entire under-surface, *chestnut red*.* The flanks and below the tail, *white* marked with *dusky*. The long wing-feathers *greyish-black* with *white* shafts.

In winter, the upper-surface is plain *ash grey*, except the lower back and above the tail, which are *white* barred with *black*. The cheeks, throat, fore-neck, upper breast, and sides, *white*, streaked and flecked with *dusky*; the abdomen *white*.

shilling a dozen for Dunlin (not seldom sold as *Snipe* in London), and I have often known of a hundred to a hundred and fifty being killed by one discharge of a big duck gun.

* The Knot, Curlew Sandpiper, and Bar-tailed Godwit each have the neck, breast, and abdomen a nearly uniform chestnut-red in summer.

The young birds in autumn are *ashy-grey* above, each feather of the back with an inner border of *dusky* and an outer one of *buffy-white*. Above the tail *greyish-white*, barred with *dusky*. The under-parts *whitish*, tinged with *reddish-buff*; the neck and sides streaked and flecked with *dusky*.

The legs and toes of the KNOT are tinged with *green*. The bill is nearly *black*, straight, and 1¼ in. in length.

Nests.—Captain Parry in the history of his first voyage in the 'Hecla' (1819–20), writes that he found the KNOT nesting in the summer of 1820 on 'Melville Island;' and Captain Lyons records that during Parry's second expedition he saw the KNOT breeding in July 1823 on 'Melville Peninsula,' both places being in Arctic America. But neither in 1820 nor 1823 did any member of Captain Parry's expeditions secure eggs to verify these assertions.

In recent years (1876) the KNOT and its young, the latter only a few days old, were obtained on the coast of Arctic America (Grinnell Land) by the naturalists attached to the expedition of H.M.S. 'Alert' and 'Discovery.' Though the KNOT has been proved to breed in limited numbers in Arctic America, yet the general nesting grounds of this *very* common bird are *undiscovered*—and its *eggs* are *unknown*.*

* Hundreds of thousands of 'Knot' come streaming from the Arctic regions in autumn to winter in Europe, Western Africa, North

KNOT usually arrive on our coasts in small detachments about the middle of August, and from the last week of that month to the end of the third week of October great flights appear at intervals, to remain a few days and then continue their journey further south.

Later in the year (about the second week of November) large gatherings of KNOT, mostly old birds, may again be observed; it is probable these have tarried on the way when voyaging from their nesting quarters in the Arctic regions, and are finally forced southward to avoid ice and snow.

I know some of our estuaries where scarce a KNOT is to be seen during the last week of October, when the autumn migrants have passed on, and yet in these places KNOT may be met with in immense congregations in November.

The KNOT that reach us in mid-November, wherever they come from, are the ones that chiefly winter in the British Islands.

Between the end of the first week of April and the middle of May, the KNOT that frequent our shores throughout the winter travel northward to nest, their numbers on the tidal banks being from time to time increased towards the end of April, and in the early

America, and even in Australia and New Zealand. We can only surmise these birds nest on some vast territory towards the North Pole, probably on land no human foot has ever trod, and may, perhaps, never reach.

part of May, by the birds of their kind that arrive from southern countries.

I have noticed plenty of Knot in May with their necks and breasts in almost the complete *chestnut red* garb of the breeding season; but in August and September I have seen only an occasional bird with *chestnut* under-parts, the first arrivals in the autumn being, in my experience, the young of the year, with *greyish-white* breasts slightly shaded with *buff red*.

The Knot that come to us in November are in full winter plumage, *grey* above and *white* below.

Next to the Dunlin, the Knot is our commonest shore-bird; it is not, however, so generally distributed as the Dunlin, though in certain districts, especially in the west of Ireland and in the east and north of England, Knot may be observed in great abundance throughout the winter. In the north and west of Scotland (the shores of the Solway Firth excepted) they are not nearly so numerous as elsewhere on our sea-board.

Knot are rarely to be seen dispersed here and there on the tidal flats like Dunlin, for they usually haunt some particular part of an estuary for feeding, and another for resting on during high-water. Till the ebb-tide uncovers the banks they are wont to visit for food, Knot stand on one leg, motionless and mute, their heads tucked among the feathers of their backs, and looking like a long row of grey stones on the beach.

When KNOT first visit us in the autumn they are unsuspicious of danger, but two or three shots fired into their ranks soon teach them caution, and they quickly become exceedingly wary and difficult to bag.

I once killed a hundred and sixty KNOT at one discharge of my stanchion-gun in the dusk of a winter's evening, having mistaken the birds in the failing light for GOLDEN PLOVER.*

LITTLE STINT†

Local name.—LITTLE SANDPIPER.

Length.—5¾ to 6 inches.

Weight.—1 oz. to 1¼ oz. (about half the size of a DUNLIN, and not larger than a HEDGE SPARROW).

Markings.—The adults of the LITTLE STINT are very similar to the DUNLIN in plumage, save that in summer the DUNLIN has the centre of the abdomen *black*, and the LITTLE STINT has the under-parts

* This shot took place in January 1881, on a small isolated sand-bank at the entrance to a creek called 'Oyster Cove,' some two miles west of Kilrush in Ireland, on the north shore of the Shannon Estuary, near its junction with the Atlantic Ocean.

† Called Little Stint for no apparent reason, as it is not smaller than the other Stints; its name should be the 'Lesser Dunlin.' (Not Little Dunlin, as the Dunlin is *little* enough as it is.)

white at that season, excepting its fore-neck and breast, which are tinged with *pale chestnut* and slightly mottled with *brown*.

The young of the year, which are most abundant on our coasts, have the crown of the head a mixture of *reddish-brown* and *dusky*. The feathers of the back *blackish*, edged with *chestnut* and *buffy-white*. The lower back *dusky*. The under-surface *greyish-white*, tinged with *buff* on the breast and its sides.

The bill, legs, and toes, *black*. The bill ¾ in. in length, and straight.

Its minute proportions, short and straight bill, and its resemblance to a DUNLIN in colouring, are characteristics that will enable you to identify the LITTLE STINT.*

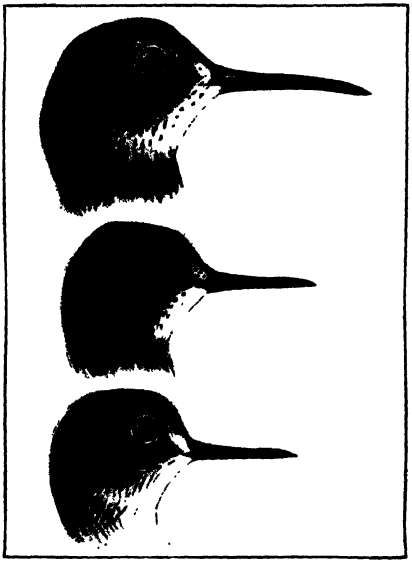
Nests.—In the Arctic regions of continental Europe and Asia, from the North Cape in Norway to the Taimyr Peninsula in Siberia. It also nests in Novaya-Zemlya, and in the Island of Kolguev.

The LITTLE STINT visits in some numbers the eastern coasts of England and Scotland when voyaging to the south in autumn from its Arctic breeding haunts; it rests again on these shores in the spring on its passage

* Temminck's Stint is a rather rare species. In general appearance and size Temminck's Stint is very like the Little Stint. Characteristic differences that will assist you to distinguish the one from the other are given on p. 438.

northward to nest, but is then less frequently seen than in the autumn.

LITTLE STINTS on their first arrival from the far



1. DUNLIN (young male).* 2. LITTLE STINT (adult). 3. TEMMINCK'S STINT (adult) (all natural size)

* This Dunlin is the shortest-billed specimen I could select from among a number of birds of the year killed in September, and shows not only the curve of a Dunlin's bill, but also its superior length when compared with the bill of either of the Stints. The bill of an adult Dunlin is a third of an inch longer than that of the young male given above, and more curved.

north in August and September, usually appear here and there on our coasts in small parties, though sometimes as many as fifty to a hundred may be seen together; but in October I have generally met with them in twos and threes, or else sparingly intermixed with other small waders.

From the end of the first week of November to the end of March I have never observed or obtained LITTLE STINTS in the British Islands, for they pass the colder months in warmer countries than ours.

On the west coast of Scotland the LITTLE STINT is unknown, and in the west of England and Ireland it is very much scarcer than in the east.

The distance some of these tiny birds travel when migrating is marvellous. They breed within the Arctic Circle and are found in winter at Cape Colony, or the southern extremity of Africa—a vast flight for so small a creature to undertake twice during the year.

I have killed LITTLE STINTS by detecting their presence with a field-glass, as they fed with DUNLIN and RINGED PLOVER, and then singling them out for a charge of SNIPE shot from the shoulder-gun.

I have never personally procured LITTLE STINTS in the spring, but have seen them on the tidal flats in May, and have had several brought to me by local fowlers as early as the second week of April.

TEMMINCK'S STINT

Length.—5¾ in. to a little under 6 in. (the least of all our wildfowl).

Weight.—¾ oz. to 1 oz., or a trifle smaller than the LITTLE STINT.

Markings.—TEMMINCK'S STINT also has the *short* (⅝ in. in length) and *straight* bill that at all times distinguishes it and the LITTLE STINT from the DUNLIN, for the bill of the latter bird, besides turning a trifle *downwards*, is never less than an inch long. (See p. 436.)

A characteristic of TEMMINCK'S STINT is, that the two outer feathers on each side of its tail are *pure white*, and its legs are *brown* shaded with *green* or *grey*.

The outer tail-feathers of the LITTLE STINT are *ash brown*, and its legs are *black*.

Nests.—Both north and south of the Arctic Circle in Norway, Sweden, and Russia; and eastward through Siberia, as far as Behring Straits.

TEMMINCK'S STINT is a rare migrant to the British Islands, but is now and then obtained inland and on the coast during the autumn and spring, when on its passage from or to its nesting grounds in the north of Europe.

This bird has only once occurred in Scotland, and once in Ireland (doubtful), but in England, especially in the east and south, TEMMINCK'S STINT has been obtained on a good many occasions, and is no doubt an annual visitor.

AMERICAN STINT

A straggler from America, that has been recorded on but two occasions in the British Islands (Cornwall, 1853; Devonshire, 1869).

RUFF AND REEVE

(The former is the male, the latter the female.)

Length.—RUFF, 12 in. to 12½ in. REEVE, 10 in. to 10½ in.

Weight.—5¾ oz. to 6¼ oz.*

Markings.—For a short period of the year (from about the end of April to near the end of June) the male shows, in a more or less perfect state, the remarkable ruff round the throat, from which his name is derived. The RUFF when in *this* stage of plumage

* Ruffs and Reeves vary considerably in weight. I have seen Ruffs of 5 oz. and Reeves of 3½ oz., but the average weight of the Ruff is 6 oz., and the Reeve 4 oz. if adult birds.

is unmistakable, its prominent erectile ruff, and the long projecting tufts of curled feathers, one on each side of the head, being so conspicuous and characteristic, though the colour of the feathers that form them varies extremely in different birds. Another peculi-

REEVE RUFF (Summer plumage)

arity, during the season named, is that the face of the male is covered with small wart-like protuberances.

I have seen these birds with ruffs of *purplish-black*, barred with *white*; of *black* and *chestnut*; and of *yellowish-white* with *black* bars. The usual colour is *brown* intermixed with *chestnut red*, and the rarest is pure

white; even a uniform *yellowish-white* is uncommon. The feathers of the upper-parts also vary in colour, and generally correspond in tint with those of the bird's ruff.

The REEVE never has a ruff round the neck, and she is a good deal smaller than the male.

In summer, the REEVE has the head and neck, *greyish-brown*, much spotted with *velvet black*. The back and smaller wing-feathers almost *black*, edged with *grey* or *buff*, some of the wing-feathers being barred across with *chestnut brown*. The long feathers of the wings *black*. The feathers of the tail *greyish-brown*, crossed with bars of *chestnut brown* and *black*. The feathers of the front of the neck, the breast, and the flanks, *black*, with broad *whitish* margins.* The abdomen, and under the tail, *white*.

The young birds, in autumn, which are the ones most frequently obtained in the British Islands, have the feathers of the back, and many of the smaller feathers of the wings, *brownish-black*, bordered with *buff*. The top of the head *reddish-brown* streaked with *black*. The under surface of the body plain dull *buff* on the neck and breast, *whitish* below.

In winter, the RUFF and REEVE are similarly attired, and their plumage then somewhat resembles the summer dress of the REEVE. The feathers of the

* The contrasts of black, brown, chestnut, and grey, on the upper and under plumage of the Reeve, give the bird a very spotted appearance in summer.

upper-parts are, however, *greyish-brown* with dark centres and pale margins. The under-parts are nearly *white*, the neck being *greyish* shaded with *brown*.

The bill of the RUFF and of the REEVE is *straight*, and varies from 1¼ in. in the male to 1¼ in. in the female. The legs and toes *brown* tinged with *yellow*.

Nests.—About a score years since RUFFS and REEVES nested sparingly in Norfolk, but *very* few, if indeed any, breed in the British Islands at the present day. Abroad, these birds nest as far north as the Arctic coast of Europe, and that portion of Siberia that is west of the Taimyr Peninsula; thence southward through Central Europe and part of Asia. The RUFF also nests in Belgium, Holland, and the north of France and Germany.*

The nest is placed, like that of the REDSHANK, in a tuft of grass in a dry situation in, or on the margin of, a marsh or swampy place. The eggs are four in number, resemble those of the REDSHANK in size, and are *greyish-buff*, marked with spots and blotches of deep *reddish-brown*.

* The prevalent idea that Ruffs and Reeves, and *all* other *now* scarce birds, are much reduced in number the world-over, from the fact that *we* do not see them annually in their old resorts in the British Islands, is an incorrect one. Many birds that are *rare* with us nowadays would soon be *common* enough again if we could only offer them (I wish we had the power) suitable protection *and* the hundreds of square miles of fen, marsh, and mere, that formerly enticed them to remain and nest within our shores.

Ruffs and Reeves were formerly so numerous on their nesting grounds in the fens of the east of England in spring, that they were caught in snares and nets by the score, and fed up for sale as delicacies for the table. These birds are *now* almost entirely migrants, and merely rest in small numbers on our shores and marshes in spring and autumn, as they wend their way to and from their breeding grounds in more northern lands.

The Ruff and Reeve, though unusual visitors to the west of Scotland, are fairly frequent on the east coast of that country, as they also are in the east of England, but they are rare on the shores of Wales and Ireland.

I have not seen a Ruff in the British Islands in its nesting costume for several years, but I have obtained a few in the autumn, when both males and females are almost the same in plumage. In the winter months I have never killed or seen either Ruff or Reeve, and very seldom in the spring, for like many other birds of double passage that travel along the east coast of the British Islands, they are most numerous when migrating southward in August, September, and October. Ruffs and Reeves are, however, occasionally obtained on our sea-board in winter.

LETTER XXXV

RARE BRITISH WILDFOWL AND THEIR NESTS

I AM well aware that many ignorant sentimentalists regard hanging as too good for the man who kills, or collects the eggs of, a rare British bird.

It is people of this description who indite mournful letters to the papers to express their regret when some chance straggler from abroad is shot, for they ludicrously assert that, if unmolested, it *might* have nested, and its kind even become fairly *numerous* in our Islands! *

Birds that wander to us at long intervals from their *native* countries will never become breeding species in the British Islands in a wild state, whatever the attractions we offer them.

To kill rare birds, or to take their eggs *if for once in a way* they nest with us, will have no influence on

* The 'Sand Grouse,' for instance! When the great flight of these birds visited us in 1888, it was a constant complaint of 'A Lover of Nature' in the country journals that 'such beautiful and interesting birds were not *allowed* to nest, as they would form a delightful addition to the British Game List'!

their increase or decrease in number, in a country they do not *naturally* belong to.

The destruction of a number of birds and their nests is quite a different matter, for many of our once common wildfowl, as the Ruff and Reeve, Bittern, Black-tailed Godwit, and others, are now scarce from slaughter with net, gun, and snare, and from egg-collecting among other causes.

On an inland preserve by all means, if so inclined, protect a rare bird, or its nest, as objects of interest, but do not imagine because you have a nest *one* year, you will have another the *next*, *unless* your guest belongs to a species that was *formerly* an annual frequenter of the district.

If you notice a strange bird on the coast in autumn (the most likely time) *do not hesitate to shoot it*, for you may never see another, as it will probably be merely a solitary specimen that has chanced to alight as a stray migrant from some distant land, or is, perhaps, a storm-blown cast-away from America or elsewhere.

Remember that even if *you* do not care to preserve a 'rara avis,' plenty of *other* folk will value it highly, and its colouring alone may augment our knowledge of its plumage.

As an *addendum* to the foregoing notes on wildfowl, I therefore give you on the next few pages a summarised table of *some* of the 'rarities' you may always be on the look out for in your excursions after wildfowl, and should you meet with any

of these birds or nests *in the localities named,* you will add interesting records to the Natural History of the British Islands.*

* Never venture to collect eggs without full permission from the owner of the land, for to appropriate eggs without leave is nothing less than a felony. The eggs of wildfowl are the property of the proprietor of the soil, who usually values them as much as the eggs of his game birds. There are, however, many wild districts, by sea and shore, in the British Islands where birds and their nests may be sought without encroachment on private rights.

An Annotated List of the Wildfowl that are *Rare* in, or have not been *Recorded* from, certain Portions of the British Islands

Name of Bird	Part of the British Islands where it is Rare or Unknown	Season of the Year in which it is most Likely to Occur	Locality it is most Likely to be Found in
Grey Lag Goose	Rare in all parts of the British Islands except in a few parts of Scotland, and of the south-west of Ireland.	Autumn	The centre of bare open marshes, large low pastures, and grain stubbles, and on tidal banks
Pinkfooted Goose	Unknown in Ireland	Autumn and Winter	
Garganey	Rare in Ireland and Scotland	Spring to Autumn	Small reed-grown lakes, and marshes interspersed with pools
Eider Duck.	Very rare in Ireland	Winter	On the open sea off the north and east coasts
Velvet Scoter	Very rare in the West of Ireland	Winter	On the open sea near the entrances to estuaries
Black-throated Diver	Very rare in Ireland	Winter	On the open sea near the entrances to the estuaries of the north and east coasts

NAME OF BIRD	PART OF THE BRITISH ISLANDS WHERE IT IS RARE OR UNKNOWN	SEASON OF THE YEAR IN WHICH IT IS MOST LIKELY TO OCCUR	LOCALITY IT IS MOST LIKELY TO BE FOUND IN
SCLAVONIAN GREBE	Rare in Ireland	Winter	On the estuaries of the south and east coasts
EARED GREBE	Very rare in Ireland and in the west of Scotland, and rare in the west of England	Winter and Spring	Estuaries, and on lakes near the coast (improbable in the west of Ireland)
RED-NECKED GREBE	Very rare in Ireland, and rare in the west of England and Scotland	Winter	Estuaries, and on lakes near the coast (improbable in the west of Ireland)
SPOTTED CRAKE	Rare in Ireland	Spring to Autumn	In marshes near the east coast
STONE CURLEW	Unknown in Wales, very rare in the west of England and in Ireland, and only once obtained in Scotland	Spring and Autumn	On downs and sandy warrens
DOTTEREL	Rare in Ireland	Spring and Autumn	On high ground in the north and east, or in fields near the coast
KENTISH PLOVER	Very rare in Ireland, and not yet observed in Scotland	Spring and Autumn	The sea-shore of the east coast

NAME OF BIRD	PART OF THE BRITISH ISLANDS WHERE IT IS RARE OR UNKNOWN	SEASON OF THE YEAR IN WHICH IT IS MOST LIKELY TO OCCUR	LOCALITY IT IS MOST LIKELY TO BE FOUND IN
RED-NECKED PHALAROPE	Unknown in Ireland	Spring and Autumn	On the estuaries of the east coast
BLACK-TAILED GODWIT	Very rare in Ireland	Spring and Autumn	On the shores of estuaries in the east
GREEN SANDPIPER	Rare in the north and west of Scotland and in Ireland (unknown in the islands of the north of Scotland)	Spring and Autumn	On the banks of streams and lakes (improbable in the west of Ireland)
WOOD SANDPIPER	Very rare in the west of England and in Scotland, and only once obtained in Ireland	Spring and Autumn	On the banks of streams and lakes near the coast (improbable in the west of Ireland)
LITTLE STINT	Very rare in the west of Scotland and rare in the west of England and in Ireland	Spring and Autumn	The shores of estuaries
RUFF . .	Rare in Ireland, and in the west of Scotland	Spring and Autumn	On marshes near the coast (improbable in the west of Ireland)

NOTE.—All these birds are more or less common in, or else regular visitors to, the British Islands, *except* in the districts named.

AN ANNOTATED LIST OF THE WILDFOWL THAT NEST IN CERTAIN PORTIONS ONLY OF THE BRITISH ISLANDS, AND OF THOSE SPECIES THAT ARE *SUPPOSED* TO NEST BUT HAVE NOT BEEN *PROVED* TO DO SO

NAME OF BIRD	PART OF THE BRITISH ISLANDS WHERE ITS NEST IS RARE OR UNKNOWN	LOCALITY THE NEST IS MOST LIKELY TO BE FOUND IN
GREY LAG GOOSE	Unknown in any part of the British Islands except in the north of Scotland	On moors and marshes, and on islands in large lakes
GADWALL	Unknown in any part of the British Islands except in the counties of Norfolk and Suffolk	In the vicinity of the lakes of the west of Ireland
PINTAIL	Unknown in England and Wales (has on a *very few* occasions been recorded as nesting in Ireland and in the north-west of Scotland)	In the vicinity of the lakes of the north of Scotland and the west of Ireland
GARGANEY	Very rare in any part of the British Islands except in the counties of Norfolk and Suffolk, where a few nest annually	In the vicinity of the smaller reed-grown lakes of the midland counties of England, and, just possibly, on those of the south of Ireland

NAME OF BIRD	PART OF THE BRITISH ISLANDS WHERE ITS NEST IS RARE OR UNKNOWN	LOCALITY THE NEST IS MOST LIKELY TO BE FOUND IN
WIGEON	Unknown in a wild state in any part of the British Islands except in the counties of Selkirk, Perth, Inverness, Sutherland, Ross, Cromarty, and Caithness, in all of which it nests annually in small numbers	Probably nests sparingly in many other districts of Scotland, and occasionally in the west of Ireland; near the shores of lakes
POCHARD	Very rare in Ireland and rare in Scotland (nests rather freely in parts of England)	On the margins of the lakes of the west of Ireland, and those of the south of Scotland
LONG-TAILED DUCK	Not yet recorded as nesting in the British Islands, but *supposed* to do so	In the vicinity of lakes near the coast in the northern islands of Scotland (possibly in the Shetlands)
COMMON EIDER	Unknown in Ireland and Wales, and only nests in England on the Farne Islands and Holy Island	The sea-coast of Northumberland (possibly on Coquet Island, a former resort)
COMMON SCOTER	Unknown in any part of the British Islands except in the counties of Inverness, Ross, Sutherland, and Caithness, wherein a few pairs nest annually	In the vicinity of lakes near the coast (possibly in the northern islands of Scotland)
GOOSANDER	Unknown in any part of the British Islands except in the highlands of Scotland	Near inland lakes, in hollow trees and in the crevices of rocks

NAME OF BIRD	PART OF THE BRITISH ISLANDS WHERE ITS NEST IS RARE OR UNKNOWN	LOCALITY THE NEST IS MOST LIKELY TO BE FOUND IN
RED-BREASTED MERGANSER	Unknown in England, Wales, or on the south-eastern side of the mainland of Scotland (nests freely in Ireland and in the west and north of Scotland, and on some of the Orkneys, Shetlands, and Hebrides	On the shores of inland lakes and on the coast, among heather or coarse grass
GREAT NORTHERN DIVER	Not yet recorded as nesting in the British Islands, but *supposed* to do so	In the Orkney and Shetland Islands and on the mainland of the north of Scotland, on the shore edge of lakes near the coast, and of islands in lakes
BLACK-THROATED DIVER	Unknown in any part of the British Islands excepting the west and north of Scotland, and the Hebrides	On the shore edge of lakes near the coast, and of islands in lakes
RED-THROATED DIVER	Unknown in any part of the British Islands except on the west side of Scotland; in the Orkneys, Shetlands, and Hebrides; and in County Donegal in Ireland	On the shore edge of lakes near the coast, and of islands in lakes
EARED GREBE	Not yet recorded as nesting in the British Islands, but *supposed* to do so	In the east of England, near shallow lakes, possibly in Norfolk
LITTLE BITTERN	Not yet recorded as nesting in the British Islands, but *supposed* to do so	In reed-grown marshes of the east of England, possibly in Norfolk

NAME OF BIRD	PART OF THE BRITISH ISLANDS WHERE ITS NEST IS RARE OR UNKNOWN	LOCALITY THE NEST IS MOST LIKELY TO BE FOUND IN
SPOTTED CRAKE	Unknown in Ireland (where it is, however, *supposed* to have nested; in England, Wales; and Scotland it does so sparingly)	In sedge-grown marshes (improbable in the west of Ireland)
BAILLON'S CRAKE	Has only once or twice been recorded as nesting in the British Islands	In sedge-grown marshes in the east of England, possibly in Norfolk
STONE CURLEW	Unknown in Scotland, Ireland, and Wales (nests sparingly in the south and east of England)	On downs and sandy warrens (never likely to nest in Ireland or Scotland), possibly in South Wales
DOTTEREL	Unknown in England, Ireland, and Wales; except in the counties of Cumberland and Westmoreland in England, where a few still nest	On the mountains of other counties in the English Lake district
KENTISH PLOVER	Unknown in any part of the British Islands except in Kent and Sussex, wherein a few nest	In Essex, Suffolk, and Norfolk, among pebbles on a smooth sea-shore
TURNSTONE	Not yet recorded as nesting in the British Islands, but *supposed* to do so	In the west of Ireland, and in the islands of the north and west of Scotland, among cover near the sea
RED-NECKED PHALAROPE	Unknown in any part of the British Islands except in the islands of the Shetlands, Orkneys, and Hebrides, wherein a few nest	In the north of Scotland, on the shores of lakes near the coast, among coarse grass

NAME OF BIRD	PART OF THE BRITISH ISLANDS WHERE ITS NEST IS RARE OR UNKNOWN	LOCALITY THE NEST IS MOST LIKELY TO BE FOUND IN
WHIMBREL	Unknown in any part of the British Islands, except in the Orkney and Shetland Islands, where it nests in small numbers	In the north of Sutherland, in Caithness, and in the Hebrides, on heath and rough, open ground
GREENSHANK	Unknown in England, Ireland, and Wales (nests sparingly in the highlands of Scotland)	In the north of Ireland and the south of Scotland, in the same localities as the Redshank
COMMON SANDPIPER	Unknown in the east of England south of the Humber (elsewhere in the British Islands it nests more or less freely)	On banks near rapid streams and inland lakes
GREEN SANDPIPER	Not yet recorded as nesting in the British Islands, but *supposed* to do so	In old nests in trees that are near marshes
WOOD SANDPIPER	Has been once recorded as nesting in the British Islands	On heaths near marshes inland
PURPLE SANDPIPER	Not yet recorded as nesting in the British Islands, but *supposed* to do so	On the coasts and islands of the north and west of Scotland, among cover near the sea
RUFF . .	Very rare in any part of the British Islands (a few years since nested in Norfolk)	In the east of England, on marshes inland

NOTE. If you are so fortunate as to find any of these nests, in the area where they are rare or unknown, make an *accurate* memorandum (aided by a sketch if you can use a pencil) of their *position* and *surroundings*, annex one or two eggs for identification, breathe not a word regarding the *exact* locality of your discovery, but record the facts, stating the county or island for the benefit of naturalists.

STANCHION-GUN SHOOTING

THOUGH I have written under this title before, yet I must, however concisely, do so again, for a work on fowling would indeed be incomplete if it did not contain *some* instruction in the delightful art of killing DUCKS and GEESE with a gunning-punt and stanchion-gun.

As nothing of a practical nature has appeared in book-form concerning this sport for many years, I have, in the interests of young shooters, no hesitation in treating it once more, especially as I find that my annual experiences have considerably increased my knowledge of the subject since I last wrote thereon.

In these letters on Stanchion-gun Shooting it will be seen the construction of the various articles necessary to the sport is first described, and their application is afterwards explained.

LETTER XXXVI

INTRODUCTORY REMARKS ON SHOOTING WILD-FOWL WITH A GUNNING-PUNT AND STANCHION-GUN

THE two kinds of gunning-punts employed for killing wildfowl are known as 'Single-handed' and 'Double-handed.' The former carry one man apiece, and the latter each require a couple of men to work them.

The SINGLE-HANDED PUNTSMAN is generally a professional fowler who shoots for the market, the sale of his birds assisting him to a livelihood. His punt is easily managed, and as his stanchion-gun is of moderate size he does not hesitate to send its comparatively small charge at three or four Ducks or Geese.*

On the other hand, the gentleman-gunner, with the larger weapon that pertains to a double-handed punt, would be loth to fire its somewhat costly load at less than a dozen birds.

The SINGLE-HANDED PUNTSMAN is independent, for he can go afloat at short notice, and, on his return to land, can haul his punt, and carry his gun, up the beach by himself, or push the two together into some snug little creek or drain, where they may await in security his next excursion.

He can also watch his opportunity and occasionally even stalk and kill his birds before the double-handed shooters are able to launch their more cumbersome belongings.

* For this very reason professional single-handed punters often do incalculable harm to a wildfowl estuary, for—unlike the double-handed men with their larger guns—the former are ever ready to pursue and fire at any three or four stray Geese or Ducks directly they appear. The few scattered fowl that *first* arrive on the coast in the autumn would, if left undisturbed, surely decoy many others of their kind to the locality. As, however, these single-handed punters can repay the cost of the discharge of their stanchion-guns if they bag but two or three fowl at a shot, the birds have, in consequence, little chance of establishing a 'haunt,' and so forming what Decoymen term a 'lead.'

Single-handed punts are suitable for land-locked water, such as the narrow channels of an estuary at low tide, and the light stanchion-guns they are fitted with are well adapted for the little groups of fowl that frequent the over-shot harbours and firths where wildfowl-shooting is in vogue.

The professional puntsman is often a man who follows sea-fishing as well as fowling, and who merely shoves his punt from shore when he sees a chance of gaining a few shillings by bagging a couple or two of Ducks.

There are not, to my knowledge, any professional punters on our coasts who, throughout the winter, daily pursue wildfowl with a stanchion-gun; these birds are too uncertain in their visits for such continual endeavour to repay the trouble at all events in Great Britain.

On the Irish sea-board there are, now and then, fowl in great abundance; but on the shores of that country they are oftener to be met with on wide exposed water than in wind-protected harbours and tidal rivers.

When long distances have to be covered, and rough water crossed (rough, that is to say, for a gunning-punt) to reach the haunts of the fowl, then a stout well-manned sailing boat is indispensable as a tender to the safety and convenience of the sportsmen—an outlay, this, that is of course beyond the means of the professional fowler.

The DOUBLE-HANDED PUNTER commonly shoots for amusement, and rarely sells the birds he kills unless he obtains more than his friends, and the poor of his neighbourhood, are able to accept—which will seldom be the case.

The gentleman-gunner in his double-handed punt is obliged to engage an assistant to aid him in working it; his gun is an expensive affair, both in itself and in its allowance of powder and shot; and he will constantly find his hand in his pocket to defray matters connected with his sport.

In double-handed shooting two men are always necessary, for a more or less unwieldy punt and gun have to be manipulated, and an amount of expenditure, trouble, and care is entailed,

which is unknown to the man who has but his single-punt to attend to.

As to the superiority of single-handed or double-handed punts, this is entirely a question of locality.

With smooth water and shy birds, as in districts where shore-shooting and punting are much practised, a man in a single-handed punt (if he knows his business) will invariably make a better bag in a season than will two men in a 'double.'

The first-named can approach his birds the faster, and from the light weight and small dimensions of his punt, he is able to push it over shallows on which the heavier craft, with its more ponderous gun, would run aground.

When fowl are scarce, and the ooze or water they resort to is guarded from wind and wave, and other gunners are competing for the birds, a single-handed punt, with a stanchion-gun of from 70 lbs. to 80 lbs., is, without doubt, the most serviceable outfit. (No. VI. p. 498.)

If open stretches of water have to be passed to try for a shot, *then* the double-handed men have it all their own way (especially if, as is usual, an attendant boat is at their disposal), for their rivals in the single-handed punts dare not venture far from shore in a breeze of wind, or risk the slight sea that a double-handed punt would easily negotiate.

A stranger to stanchion-gun shooting is sure to comment—after he has inquired the range of your gun, which he is surprised to hear is less than half a mile and in no way relative to its length of barrel—on the exposure and fatigue you, in his opinion, undergo. Cold I have never felt - there is too much to do in a gunning-punt to feel cold if you take your turn at rowing, paddling, poling, sculling, and pursuing cripples; and when stalking fowl the excitement will circulate your blood, and thus keep you warm.

As to hard work, I consider this, in a gunning-punt, but pleasurable exertion.

When, however, birds are really numerous, the weather very boisterous and severe, and you are afloat day and night, snatching, maybe, food and sleep at irregular hours, then I admit that punting is, at times, a queer mixture of ecstasy and slavery.

The man who owns a single-handed punt does all the work himself—rowing, paddling, shooting, and cripple-chasing; if he knocks down a good many Ducks or Geese at a shot, he may have not a little difficulty in retrieving the wounded, for he has to row or pole up to them and fire his shoulder-gun almost simultaneously. If, as more often occurs, he drops but a few birds, he can soon pick them up.

The gentleman-gunner, in his double-handed punt, has also no lack of exercise, though when being actually taken up to fowl by his puntsman, he has the stanchion-gun only to serve, and hence both his hands are at liberty to direct its aim. In the latter respect he has a great advantage over the single-handed shooter, who is forced to propel and steer his punt and fire his big gun well-nigh at the same instant—a combination of duties that is apt to impede a quick shot, particularly when birds are on the wing.

With a double-handed punt very few cripples should ever escape, for your assistant can pull or pole you up to these, whilst you pop away at them with your 12-bore till, one by one, they are all gathered.

Seeking wildfowl with a single-handed punt is, I confess, a rather solitary recreation, but, for the reasons I have given, is the most 'killing' method for the professional shooter to adopt.

The gentleman-gunner in his double-handed punt is never alone, and he will find the association of an attendant adds greatly to the enjoyment of a cruise after wildfowl.

It is at all times pleasant to have a companion with you who appreciates your successes and condoles in your failures—one who is willing to share with good temper the toil and danger of punting, and is also keenly interested in the chances of sport, the weather, the various birds, and the many little adventures incidental to GUNNING AFLOAT.

LETTER XXXVII

THE CHOICE OF A STANCHION-GUN, WITH SOME GENERAL ADVICE REGARDING ITS SIZE, CONSTRUCTION, CHARGE, AND CAPABILITIES

You will have to select a stanchion-gun to suit the style of gunning-punt you propose to use, the punt and its gun being necessarily adapted to each other and to the locality they are intended for.

If fowl are fairly numerous, a heavy shot now and then practicable, and you play the part of a gentleman-gunner, then a full-sized Double-handed punt, and its correspondingly large gun, is the best outfit to employ (p. 493). In this case the dimensions and charge of your stanchion-gun may be:

Total weight	170 lbs.
Length of barrel . . .	8 ft. 8 in.
Diameter of bore . . .	$1\frac{7}{8}$ in.
Load of shot	$1\frac{3}{4}$ lb.
Charge of powder . . .	$5\frac{1}{2}$ oz.

If you prefer a smaller Double-handed punt and gun* (p. 494), the latter can be:

Total weight	150 lbs.
Length of barrel	8 ft. 6 in.
Diameter of bore . . .	$1\frac{3}{4}$ in.
Load of shot	$1\frac{1}{2}$ lb.
Charge of powder . . .	$4\frac{3}{4}$ oz.

For a very light and fast Double-handed punt (p. 495), the gun should be:

Total weight	130 lbs.
Length of barrel	8 ft. 4 in.
Diameter of bore	$1\frac{5}{8}$ in.
Load of shot	$1\frac{1}{4}$ lb.
Charge of powder . . .	4 oz.

* The punt built in Letters XLIII, XLIV.

If birds are scarce, a big shot improbable, and you are a professional shooter [or a gentleman-gunner who also prefers a small outfit owing to its economy], then the most useful stanchion-gun for an ordinary Single-handed punt (p. 497) will be:

Total weight	95 lbs.
Length of barrel	8 ft. 2 in.
Diameter of bore	1½ in.
Load of shot	1 lb.
Charge of powder . . .	3 oz.

For a light and fast Single-handed punt (p. 498) the stanchion-gun can be:

Total weight	80 lbs.*
Length of barrel . . .	7 ft. 8 in.
Diameter of bore . . .	1¾ in.
Load of shot	12 oz.
Charge of powder . . .	2¼ oz.

A cylinder-bored barrel is far preferable in a stanchion-gun to a choked barrel. The latter cuts too narrow a lane through a number of birds, whether they are resting, swimming, or flying. What a stanchion-gun should do is to shoot *hard* and give a *wide* and *even* spread to its shot-charge.

If the pattern of a stanchion-gun is a very close one the birds are killed twice over, for those aimed at in the centre of the company will be smothered with pellets, and the ones a little to the right and left of these will escape unharmed, instead of, as they should be, also killed.

* The weights given for these four guns refer to breech-loaders, which latter, on account of the false breech, stock, and amount of metal over the chamber, each weigh at least 10 lbs. more than would a muzzle-loader of similar bore and charge.

A stanchion-gun should, however, be rather too heavy than too light for its load. A full measure of powder in a light barrel means excessive recoil, and a reduced allowance of powder in the same gun usually gives a low velocity to the shot. Powder and shot *both* reduced, and the gun will not kill nearly so well as when loaded with its proper charge, if, that is, this charge is adapted to the bore and weight of the barrel.

Stanchion-guns are now 'proved' far more severely than formerly, a nearly double proof charge being used as a test to what was the case in the days of muzzle-loaders.

This necessitates additional metal round the barrel and increases considerably the weight of the gun.

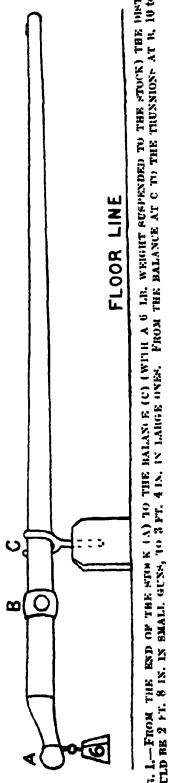


FIG. 1.—FROM THE END OF THE STOCK (A) TO THE BALANCE (C) (WITH A 6 LB. WEIGHT SUSPENDED TO THE STOCK) THE DISTANCE SHOULD BE 2 FT. 8 IN. IN SMALL GUNS, TO 3 FT. 4 IN. IN LARGE ONES. FROM THE BALANCE AT C TO THE TRUNNIONS AT B, 10 TO 12 IN.

THE BALANCE OF A STANCHION-GUN

This should be as adjacent to the breech-end of the gun as possible. If a gun balances too near its centre of length, there will be so much barrel and stock intruding into the cockpit of the punt that the shooter will not only be greatly cramped for room to work in, but, from being forced to lie so far aft when stalking birds, his punt will float out of trim.

To obtain the balance of a stanchion-gun in the right place (as shown in fig. 1) the barrel will require to be heavy at the breech, and finely tapered from thence to the muzzle.

The balancing point of a stanchion-gun must not, however, be so nicely exact that you can see-saw the barrel either way. The gun will have to be slightly over-balanced at the muzzle, or it will tip about in your punt, and, from its unsteadiness, shoot incorrectly.

If the gun is properly balanced a six-pound weight attached to its stock should lift the muzzle clear of the ground or floor, and bring the barrel into a horizontal position (fig. 1).

Be careful that the trunnions for the rope-breeching are fixed to the barrel at least 10 in. behind the balance of the gun (fig. 1). If the trunnions are too near the crutch in which the gun balances the contraction of the rope, after firing the gun, may bring them in violent contact with the crutch and snap it in half.

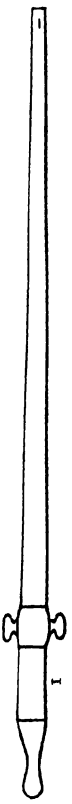


FIG. 2

I. Trunnions attached to barrel (shrunk on and screwed).
II. Trunnions and trunnion-band (section) shown separate from barrel. (For rope-breeching fitted to gun see p. 556.)

THE RECOIL OF A STANCHION-GUN

No simpler, cheaper, lighter, and more effective arrangement than the old-fashioned Trunnions and Rope-Breeching has ever been devised for absorbing the recoil of a single-barrelled stanchion-gun. For this reason it is needless to describe other contrivances designed for the same purpose, most of which (excepting Colonel Hawker's admirably efficient spiral spring) are as intricate and fantastic as they are useless.

Rope-breeching passed through a hole in the stem of the punt and noosed to trunnions (fig. 2) takes the recoil of a large or small stanchion-gun pleasantly and safely, without undue strain or jar, for the jump backwards of the gun, when fired, comes straight against the slightly yielding rope, and the charge then leaves the muzzle true to alignment.*

If a rope-breeching is secured to an eye-bolt *under* the barrel the recoil is certain to more or less jerk the muzzle of the gun off the aim taken by the shooter.

* Each trunnion should project 2½ in. to 3 in. from the side of the barrel, and be about 1¼ in. in diameter at its neck where encircled by the breeching-rope.

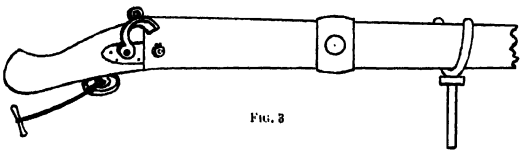


FIG. 3

THE STOCK OF A STANCHION-GUN

Let this be as straight, and as small and neat (at most a foot in length) as it can be made, and from 6 lbs. to 8 lbs. in weight, according to the dimensions of gun. All you require in respect to stock is something to press the hand on to direct or elevate the barrel with, and which is but just large enough to contain the lock mechanism (fig. 3).

The longer, and more crooked downwards, the stock of a stanchion-gun, the less will you be able to depress it in the punt, and hence the less elevation can you give the muzzle for a flying shot. A long stock merely curtails valuable space in the cockpit of a fowling-punt, without *any* advantage to the handling of the gun.

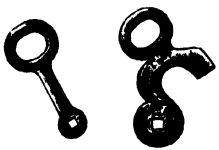


FIG. 4

THE HAMMER [OR COCKING LEVER] OF A STANCHION-GUN

This should terminate in a ring instead of in the usual thumb-piece (fig. 4); the finger, if inserted in this ring, cannot then *slip* (whether cold, wet, or gloved), and the lock can, therefore, be quickly and *safely* cocked or uncocked at all times.

FIG. 5

THE TRIGGER OF A STANCHION-GUN

If this projects, it is liable to be struck by an oar, paddle, or pole, or to be caught by some gear of the punt. If the gun is loaded, such rough contact may lead to the waste of a charge, if not to an accident. The outer end of the trigger should take the form of a small eye that only shows an inch below the stock, and which is protected by a broad compact guard; the latter having a hole through it for the passage of the cord that connects the shooter's hand with the trigger (fig. 5).

SAFETY STOP TO HAMMER

Always a desirable addition to a stanchion-gun, as when stalking fowl and a shot is expected, you can disengage this stop in an instant (without showing your hand), or push it in and lock the hammer if the birds rise out of range. You can then uncock the gun at leisure.

FIG. 6.—SIZE 1½ INCH LONG, ⅜ INCH HIGH, ¼ INCH WIDE AT BASE TO ⅛ INCH AT TOP

THE SIGHT OF A STANCHION-GUN

The sight on the muzzle should be high, long, and narrow. If long and narrow you will at once realise if the gun is directed to one side or other of the birds you are aiming at, and with a fairly high sight you can take a fine aim at a short range, and a full one at a long range (fig. 6).

A *wide* back-sight is necessary; a *narrow* one is most unsuitable, for you rarely have time to deliberately aim a stanchion-gun at a number of restless wild fowl, as if you were sighting a stag with a rifle. An opening filed in the top of the trunnion-band makes the best back-sight.

THE MUZZLE OF A STANCHION-GUN

To be rounded inside and out at its extremity. If sharp-edged it will, if it chances to encounter the punt (or your ribs), leave a deal more lasting impression than it would were it filed smoothly away at this part.

THE PATTERN AND PENETRATION OF A STANCHION-GUN

A gun that fires 1 lb. should, at a distance of 65 yards from its muzzle, its barrel 2 ft. above the level of the ground, average on a sheet-iron target 10 ft. wide by 2 ft. high, 170 180 pellets of the B B shot that measures 50-56 pellets to 1 oz. If the gun has a cylinder barrel, and spreads its charge evenly, the target ought to be dotted with shot-marks its entire width.

From the above *data* it can be judged about what pattern a larger or smaller gun should make on a similar target with the same size of shot.

If you find the pellets are flattened to the thinness of paper, with their edges broken and starred, you may rest satisfied with the driving power of your gun.

If the pellets are *not* flattened, the gun shoots weakly. In this case try less shot or more powder. If the gun shoots patchy and irregularly, reduce the powder, but not the shot.

THE CORRECT CHARGE OF POWDER AND SHOT FOR A STANCHION-GUN

This you may generally consider to be at the rate of 3 oz. of powder to 1 lb. of shot; though some stanchion-guns kill better with a slightly smaller amount of powder than 3 oz. to 1 lb. of shot, and others with a little more.

If, for instance, you fire 1 lb. from a gun of $1\frac{3}{8}$ in. bore, then $2\frac{3}{4}$ oz. of powder is sufficient; but with a barrel of $1\frac{1}{2}$ in. bore, a full 3 oz. to 1 lb. of shot is requisite.

In guns that are loaded with a heavier charge than 1 lb., or are of wider bore than $1\frac{1}{2}$ in., the proportion of powder to shot may be somewhat augmented.

A gun that carries

$1\frac{1}{4}$ *lb.*	*of shot may be given*			4 *oz.*	*of powder*	
$1\frac{1}{2}$ *lb.*	„	„	„	$4\frac{3}{4}$	„	„
$1\frac{3}{4}$ *lb.*	„	„	„	$5\frac{1}{2}$	„	„
2 *lbs.*	„	„	„	$6\frac{1}{4}$	„	„

Bear in mind that if a stanchion-gun is charged with its *full* allowance of powder, and a *large* size of shot, such as SSSG., it is always liable to scatter the pellets *very* widely apart.

In this case diminish the powder $\frac{1}{4}$ oz. in guns that are under $1\frac{1}{2}$ in. in bore, and $\frac{1}{2}$ oz. in guns of $1\frac{1}{2}$ in. bore or over. With smaller shot, as AA, or BB, use a good measure of powder.

THE 'KILLING' RANGE OF STANCHION-GUNS

This is, as a rule, absurdly over-estimated. It is *not* the distance these guns shoot, which is nothing very wonderful with duck shot, but the *immense charge* they throw, that does such deadly execution among a number of birds.

If fowl are densely packed, especially should they be flying in close rank, *then* you will kill a larger percentage at a long range than you ever will when there are a comparatively small number to fire at.

In the former event the entire load of shot is scattered among the birds, and as there are so many of them, 'tis of course probable a good few will be struck in vital parts.

In the latter case, the target being smaller, it is less likely to be hit by the bulk of the shot, much of which can have no chance of striking birds.

I have very seldom achieved a really heavy shot with a stanchion-gun at Ducks, Wigeon, or Teal, beyond 65 yards!

At 75 to 80 yards a charge of medium-sized shot, such as B B [50–56 pellets = 1 oz.], has lost much of its force, and scatters over too broad a space to kill a fair proportion of a collection of Ducks, *unless* the birds are *very* numerous, *and* in the act of rising off the water or ooze. With *large* shot such as A A (40–42 pellets = 1 oz.) I have, however, made many fine shots at Wild Geese at 80 yards, and even up to 90 yards if the birds were in plenty and flying thickly together.

Ducks and Geese may be dropped to a stanchion-gun, loaded with swan-shot (S S G), at 150 to 200 yards, *if* the shooter wantonly blazes off at these extravagant ranges into a mass of fowl on wing.

Such reckless behaviour is, however, most unsportsmanlike, cruel, and selfish.

Unsportsmanlike—Because such random shooting is *never* successful, and is no test of skill.

Cruel—Because to the very few birds that chance to fall, several others fly away wounded.

Selfish—Because the birds are sure to become so shy of the

very sight of a gunning-punt that the fowler who honestly strives to approach them within proper killing-distance has little hope of succeeding.

Any bungler can stalk wildfowl till they are at some 200 yards from him, and then fire bullets (in the form of great mould shot) out of a stanchion-gun, and stop a couple or two.

On the other hand (if the fowl are *not* continually harassed at preposterous ranges by slug-shooting pirates), the man who knows his work can often steal inch by inch close up to the same birds, though it take him an hour to do so, till, at from 60 to 70 yards, he is able to fire a charge of B B at them, and thus earn a well-merited shot that may result in twenty or thirty Ducks or Geese.

LETTER XXXVIII

MUZZLE-LOADING STANCHION-GUNS

It is a popular fallacy among people who are ignorant of fowling afloat that breech-loading stanchion-guns are vastly superior in all respects to our old friends that are rammed down the muzzle.

The former, for many good reasons, will *never* supersede the latter in general use, particularly in regard to professional fowlers.

It is true the gentleman-gunner, with a well-filled purse, rushes open-mouthed after a breech-loader when he first enters on the sport of big-gun shooting; but he may quite possibly discover that a gun, though simple enough to *load*, may be a very inferior weapon to *kill fowl with*.

To every breech-loading stanchion-gun there are a score of well-tried old muzzle-loaders to be picked up at from 10*l*. to 15*l*. apiece, many of these being in as good condition as the day they were completed for sale, whereas a new breech-loader will cost you from 60*l*. to 80*l*., and a second-hand one from 30*l*. to 40*l*.

A muzzle-loading stanchion-gun is considerably *lighter in weight* than a breech-loader of a similar bore and charge, is *much less expensive* to purchase and use, is very *simple* and *safe*, and rarely becomes unserviceable from neglect or the roughest treatment.

The muzzle-loader requires no cartridges, or special care, and will kill birds as *well* and *far* as the best breech-loader money can buy.

The three disadvantages of a Muzzle-Loader are:

(I.) It is liable to miss-fire.

(II.) It occupies a longer time, and gives more trouble, in loading than does a breech-loader.

(III.) Its shot-charge cannot be quickly changed should it be necessary to do so, as when several species of wildfowl are met with in one day.

As to the time expended in charging a muzzle-loader, this is but five to ten minutes at most—a matter of little importance when we consider that if a fowler fires a couple of shots in a day he is fortunate, his usual number being three or four in a week, or even less.

The only *serious* drawback to the muzzle-loader is its mischievous tendency to *miss-fire*. The miss-fires that now and then occur in muzzle-loading stanchion-guns are annually the cause of more bitter disappointment and strong language than is, I believe, possible in connection with any other sport.

If a miss-fire does take place, it is pretty sure to be at the finest pack of birds you ever saw, and which, after repeated attempts, you have at last approached within easy killing-range. 'Tis cruel ill luck the miss-firing of a stanchion-gun at a great company of Ducks or Geese.

Life on these occasions is a dreary blank; for, like the monster salmon, or the splendid stag, that also nearly always escape, here again you are compelled to realise that your grand opportunity, the one splendid chance you ever had of making a record shot, is ruthlessly snatched from you at the moment when success was, in all human probability, assured.

The cause of so many miss-fires in muzzle-loading stanchion-guns is the *miserably ineffective* ignition they are commonly fitted with. Perhaps a single copper cap, or a detonating tube, has to blow its feeble jet of flame through a narrow, tortuous, and clogged aperture of two inches in length ere it can reach and fire the charge of powder in the chamber of the gun.

A weak cap, or a choked passage between the nipple the cap rests on and the interior of the barrel, will surely create a miss-fire, and as such contingencies are not unusual; the wonder is that miss-fires in muzzle-loading stanchion-guns are not more frequent than they are.

The only plan of ignition that makes a miss-fire practically *impossible* in these guns is one in which the hammer, on your pulling trigger, ignites a small thimbleful of powder and drives this, in the form of a strong flash, straight into the main charge, with sufficient force to *easily* overcome any obstacle in the shape

of dirt or rust (fig. 7). The first cost of an addition of this description to your gun will be repaid you ten times over; for it will save many birds and much temper you would otherwise lose.

With this method of ignition (no new dodge) I, and my puntsmen, have fired *without a single failure* in all weather, rain, snow, and frost, over fifteen hundred shots from muzzle-loading stanchion-guns that, previous to attaching this little contrivance to their respective barrels, I could never feel confident would explode.

AN INFALLIBLE IGNITION FOR A MUZZLE-LOADING STANCHION-GUN WHICH CAN BE APPLIED TO ANY BARREL, OLD OR NEW (FIGS. 7, 8, 9.)

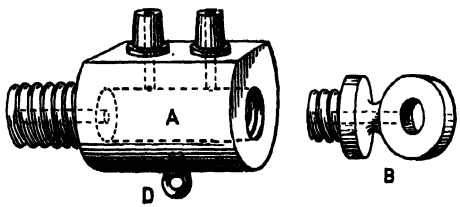


FIG. 7.—DOUBLE-CAP IGNITION FOR A MUZZLE-LOADING STANCHION-GUN. (Full size)

I. Turn the barrel partly on its side and fill the chamber A, to within ½ inch of its open end, with some of the coarse powder you use for the main charge of the gun. (Fine powder is apt to cake and thus cause a hang-fire.)

II. Screw in the plug B, which has a $\frac{1}{16}$ inch, in diameter, vent hole through it. (This hole can be stopped with lard at its outer end if the gun is likely to remain loaded for some days.)

III. Place a cap on each nipple, and all is ready for action.

N.B.—Noose a piece of tarred cord round the neck of the plug B and knot the other end of the cord to the small eye D. The cord will secure the plug from being mislaid when it is removed for priming purposes. Should the screw-plug stick, so that your fingers cannot unturn it, then the point of a small marlinspike will soon twist it out.

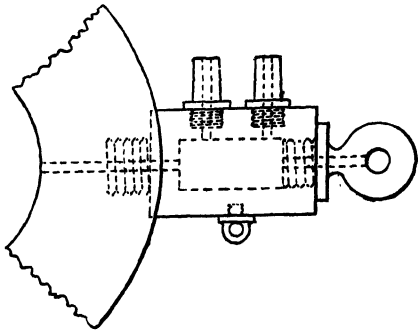


FIG. 8. IGNITION ATTACHED TO BARREL (section)

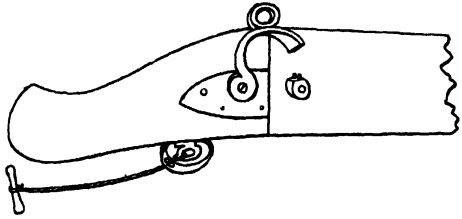


FIG. 9.—IGNITION ATTACHED TO BARREL (side view) AND SHOWING BROAD-NOSED HAMMER THAT SHOULD IGNITE BOTH COPPER CAPS SIMULTANEOUSLY

LETTER XXXIX

HOW TO CHARGE A MUZZLE-LOADING STANCHION-GUN

CLEANING.– As soon as possible after firing a shot, rub your gun out two or three times with plenty of soft coarse tow, *loosely* twisted in and round the loop of the cleaning rod (fig. 10). If this tow fits the bore too closely, it is liable to push the fouling (from the burnt powder) before it into the breech-end of the gun and thus cause a miss-fire.

Next give a final polish with as tight a handful of fresh dry tow as you can insert in the muzzle without subsequent risk of a 'jam.'

As this is forced down you should plainly hear the air, as it becomes compressed in the barrel, whistle through the ignition aperture, which will prove there is no obstruction in that part.

Tow is far superior to oakum for rubbing out a stanchion-gun. Oakum is too close-textured and tarry to absorb the large amount of moist sediment left by the explosion of several ounces of powder, and hence it will smear this residue over the inside of the barrel instead of removing it.

Keep, in your ammunition box, a supply of tow stuffed into a small canvas bag (the size of a sponge bag), and which can be secured at its opening with a running tape.

FIG. 10.—CLEANING ROD (ASH)

The rod to be 1 in. in diameter, but tapering from its centre to ¾ in. at the end to which the, 3 in. long, iron loop is fixed that holds the tow for cleaning the gun. The reverse end of the rod to the loop to be fitted with a, 1½ in. long, *fired* screw for drawing the shot, or the oakum wads. When not in use the screw may be protected by a small brass cap (fig. 10). The rod to be one foot longer than the barrel.

FIG. 11.—LOADING ROD

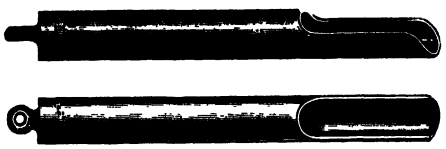


FIG. 12.—POWDER SPOON

FIG. 13. POWDER SPOON ATTACHED TO LOADING ROD

CHARGING WITH POWDER

The simplest method of doing this is by means of the old-fashioned metal loading-spoon (fig. 12), which, when full of powder, can be quickly attached to a long rod (fig. 11) and run up the barrel. When the spoon is filled with powder to just where its open, i.e. cut-away part, commences, the amount it then contains should be the exact charge for the gun.*

To load, hold the spoon upright in the left hand, pour in the powder from the 1 lb. canister kept in the ammunition box, and hitch the eye of the spoon to the hook of the rod (fig. 13).

Lay the gun in a level position along the fore-deck of the punt, and gently push the spoon and rod up the barrel till the

* For instance, a gun of 1¼-in. bore, with a charge of 3 oz. of powder, will require a spoon 1¼ in. outside diameter, and 4⅛ in. long inside from base to opening. Total length of spoon 9 in., including its 4 in. projecting open part, and its, ⅛ in. thick, solid base, to which the eye is riveted that hooks the spoon to the loading rod.

point of the spoon is in contact with the breech and can go no farther.

Next tilt the muzzle up two or three feet, shake the loading rod a few times, so as to rattle all the powder out of the spoon, and slowly withdraw the rod half its length *before* lowering the barrel, and the powder-charge will be well home in the gun.

To enable the spoon to pass freely along the barrel, its outside diameter must be $\frac{1}{4}$ in. less than the bore of the gun.

The shovel-shaped open part of the spoon to project 4 in. beyond its circular portion; the former will then retain the part of the powder-charge that is sure to shift longitudinally as the spoon is being shoved up the barrel.

The rod to have one side planed *flat* its entire length, and this flat surface and the open part of the spoon should *both* be *in line* and directed *upwards* when the spoon and rod are hooked together for loading the gun (fig. 18). If you *insert* and *keep* the rod with its flat side uppermost during the process of charging, you will, by day or night, know the open end of the spoon is *upwards* in the barrel, in which case you cannot spill the powder in its transit from muzzle to breech.

The spoon can be made out of $\frac{1}{16}$ in. sheet *copper* (on *no* account iron).

The loading rod of larch,* $1\frac{1}{8}$ in. in diameter, and one foot longer than the barrel; the hook on its end of copper.

THE WADDING

We have next to place a wad over the powder. There is no material so suitable for wadding a muzzle-loading stanchion-

* If the loading rod is of ash or elm, it will be too heavy for dexterous use.

gun as soft (i.e. fresh-picked) oakum. Take a handful of this, compress it as tightly as you can, bind it round and round lengthways with fine cord, and then roll it under your foot to give it a circular sausage-shaped form.

When finished (such articles to be of course prepared beforehand) the wad should fit the barrel, and at the same time be half as long again as the bore of the gun is wide, for it will shorten considerably from the pressure of the loading rod.

For instance, the wad of a 1½-in. gun will be 1½ in. thick and 2¼ in. in length.

To insert the wad, tip the gun till you are able to rap the end of its stock smartly against the floor of the punt; or, if you cannot do this, elevate the barrel as high as you can, and give it some hearty thumps underneath with your fist. Either act will send the powder home again if it has shifted since it was put in the gun. With the muzzle *still raised*, now ram the wad, by means of the broad head of the loading rod (fig. 11), firmly down on the powder. A few *light* blows will do this effectually; if you use too much force you will 'cake' the powder, and the gun will not only then recoil heavily when fired, but will also shoot incorrectly.

CHARGING WITH SHOT

The shot in a stanchion-gun requires to lie compactly in the barrel, and of course in close contact with the wad over the powder, otherwise the gun will never kill as it should do.

After many experiments I find that, if the shot is run in a *loose* state into the barrel and *well wadded*, it is driven with quite as much force and regularity as when inserted in the form of a cartridge.

To load with loose shot.—Keep a round tin measure, which when full holds the correct charge, in your ammunition box, and fill this from the canvas bag of shot also kept in the box. Tilt the muzzle of the gun upwards, empty the contents of the measure down the barrel, twist up a little ball of soft oakum to the size

of the bore, and, without lowering the gun, ram this on the top of the shot with the butt end of the loading rod. The oakum will push, and then retain, the shot in its place, a few taps from the rod being sufficient to expand it into a good wad.

To change the shot.—Draw the oakum—'tis easily done—with the screw in the butt of the cleaning rod (fig. 10, p. 475), hold the mouth of the shot bag closely round the muzzle of the gun, incline the barrel slightly downwards and the pellets will come rattling into the bag.

FIG. 14.—SHOT-CHARGE DONE UP IN FLANNEL.

If you are only likely to encounter *one* species of wildfowl in your excursions, you will not run the risk of having to change the shot in your gun at a moment's notice, as *might* be necessary when several kinds of birds, large and small, are about.

In this case, previously tie the shot-charges up in round pieces of thin flannel (fig. 14). You can very quickly ram one of these little shot-bags down the barrel, and a small twist of loose oakum, inserted at the same time, will keep it in position.

Be careful not to wrap the shot *tightly* in the flannel in the form of a hard ball, but let a third of each small bag be empty, so that its contents can easily enter the muzzle of the gun.

Shot done up in this fashion packs very closely and firmly in the barrel, and, in my experience, shoots quite as well as any cartridge.

If it happens you have a variety of these shot charges in the ammunition box, you can *feel* the size of the pellets they contain through the flannel, which is often a great convenience at night.

SHOT CARTRIDGES

If you do not grudge the time and trouble required for making shot cartridges, you will find a muzzle-loading stanchion-gun can be easily and rapidly loaded with their aid.

These cartridges are also very convenient for storage in your ammunition box; they may represent two or three different sizes of shot, and as they can be drawn from the gun [with the screw in the cleaning rod] without any difficulty, they enable you to quickly substitute one kind of load for another.

HOW TO MAKE A SHOT CARTRIDGE

I will describe the construction of a 1-lb. cartridge for a barrel of $1\frac{1}{2}$ in., as this is a common load and bore for muzzle-loading stanchion-guns.

(I.) Procure a piece of close-grained wood, 5 in. long, and have it turned in a lathe to a diameter of $1\frac{5}{16}$ in. [This will allow $\frac{1}{16}$ in. for the thickness of the paper wrapping over the shot, and $\frac{1}{8}$ in. to spare for the easy passage of the cartridge down the barrel.]

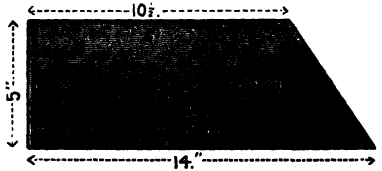


FIG. 15—PAPER SHAPE FOR SHOT CARTRIDGE

(II.) Cut a piece of hard thick paper to the form and dimensions given in fig. 15.

[A piece of thick tin the proper size and outline is a convenience, as you can rest this on your paper, and run a sharp knife round the edges of the tin. Each pattern will then be accurately shaped.]

(III.) Lay the wood roller level with the square end of the paper, and roll the paper tightly round it.

(IV.) Hold the case, now formed, so that it cannot unwind, push the roller an inch up its inside, and turn the part of the case then left empty, inwards, firmly over the base of the roller.

(V.) Pull out the roller from the paper, pour 1 lb. of shot into the case and turn over its open end to close it. Next place a little bundle of oakum at one extremity of the case, and tie the oakum and the case together, longitudinally, with sailmaker's twine or narrow tape, either of which will lie flat to the paper (fig. 16).

The oakum on the end of the case will engage the screw of the cleaning rod, should you wish to extract the shot from the barrel.

FIG. 16.—SHOT CARTRIDGE COMPLETED

With ordinary fingers and thumbs you can finish off a dozen or more of these shot cartridges in an hour, without any paste or wax, or appliances other than those described.

For a gun of $1\frac{3}{4}$ in. bore, firing $\frac{3}{4}$ lb. of shot, the wood roller will be $1\frac{3}{16}$ in. in diameter, and $4\frac{1}{2}$ in. long. The width of the paper shape will also be $4\frac{1}{2}$ in., so that it may match the length of the roller.

The length of the paper shape can be nearly the same for all sizes of cartridges, though its width will vary (and hence the length of the roller it is wrapped on) to suit the amount of shot the cartridge is intended to hold. In all guns the wood roller should be $\frac{3}{16}$ in. smaller in diameter than the bore of the barrel.

Having now loaded your gun, the last, and most important, matter of all to attend to is its IGNITION. How to prepare this I have already fully explained (p. 478).*

* When your gun is correctly loaded, place the loading-rod down the barrel, its butt-end against the wad over the shot, cut a circular nick with your knife round the rod level with the muzzle of the gun; this nick will then tell you, by day or night, if the powder, shot, and wads are properly placed in the barrel.

LETTER XL

BREECH-LOADING STANCHION-GUNS

THERE are many varieties (some *very* strange ones) of breech-loading stanchion-guns, though with one or two exceptions they are all quite unsuitable for *active service* in a gunning-punt.

The incorrect balance, heavy weight, cumbrous build, intricate manner of loading, and the levers, springs, knobs, and bolts they usually possess, at once condemn the great majority of these guns in the eye of the *practical* fowler.

Outside projections on the barrel of a stanchion-gun (save the indispensable trunnions) are terribly in the way, and are apparently planned to collect rust and hamper the movements of the shooter in the manipulation of his punt.

Nearly all these much-advertised breech-loaders can be opened and shut with a snap like a man-trap in a *dry* and *roomy* gunmaker's shop, but 'tis quite another pair of shoes when they have to encounter *rough* and *wet* usage at sea in a small narrow craft like a gunning-punt.

A tumble in water or mud, a bucketful of salt spray drenching the stock and lock, together with unavoidable hard thumps from oars, paddles, and poles, soon damage a gun of inferior design.

Very few of the patent breech-loading stanchion-guns offered for sale *can even be fitted* in a gunning-punt without considerable and costly alteration, for such important items as a safe and convenient recoil, size of stock, balance, and weight and length of barrel, are matters seldom considered in their manufacture.

You need but try to arrange and use one of these fanciful articles in a gunning-punt to realise the absolute ignorance of its inventor regarding the *work* a stanchion-gun is *intended* for. For example, I lately inspected in London a brand-new stanchion-gun (price 80*l.*), with a highly-polished hinged stock a yard long. It might be practicable to drop this class of stock sufficiently to load the barrel if the latter were rested atop a garden wall. In, however, an ordinary gunning-punt of some 12 in. in depth, not only would it be *impossible* to lower the

FIG. 17.—THREE HEADING STANDARDS

stock enough to elevate the barrel for a *flying* shot, but it would be equally out of the question to let it fall to an angle that would allow a cartridge to be *inserted* in, or *extracted* from, the gun.

I only know *one* system of breech-loading stanchion-gun that fulfils *all* the requirements of a gunning-punt, for this gun is safe, simple, rapid in loading, water-tight in its mechanism, devoid of any projections to interfere with the shooter, and from its construction is of *lighter weight in relation to its charge* than any other gun of its kind. The gun I allude to is the joint invention of my friend Captain G. Gould and of Mr. Henry Holland and myself, and is one I have successfully employed for many seasons, at home and abroad, under *all* phases of fowling in a gunning-punt. The patentees and makers are Messrs. Holland of 98 New Bond Street. I here give drawings of this gun, with full details of its mechanism (fig. 17).

DESCRIPTION OF BREECH-LOADING STANCHION GUN

I. Gun closed. II. Gun with lever unlocked, and stock partly opened. III. Enlarged view of stock and breech-end of barrel, with breech-screw turned in. IV. V. End and side view of breech-screw, showing slot in which the round projection of the revolving head (VI) is inserted. VII. Breech-screw with revolving head attached, and handle (for turning screw in or out of barrel) hinged to its square end. VIII. The striker and its fittings. (The striker passes through centre of breech-screw and revolving head (see dotted lines in VII), and holds the latter in place when the two parts are connected.) IX. Section of breech-end of barrel, showing back-sight; screw-hole for locking lever; and slots for claws of revolving head. These two claws grip the rim of the cartridge-case, and withdraw the fired cartridge from the barrel as the breech-screw is turned out by means of its handle.

There is no doubt that a *really efficient* breech-loading stanchion-gun is a safe, and very handy, weapon. It can be quickly re-charged after a shot, easily unloaded on your return home, its

cartridge can be shifted in a couple of minutes for one that contains a different size of shot, and its barrel is readily cleaned.

This all implies much economy of time and labour.

Whether, during a season's shooting, you will always bag a larger number of fowl with a breech-loading stanchion-gun than with a muzzle-loader is doubtful; but you will certainly obtain your birds with far less trouble by means of a good breech-loader than you will with a muzzle-loader.

It sometimes happens that a company of fowl, on their first arrival in the autumn, (when young and unsuspicious) alight again at no great distance after a shot; with a breech-loader you can very soon pop in a fresh cartridge and thus proceed to once more stalk them without the least delay. On the other hand, with a muzzle-loader—especially if it is a heavy gun and you are afloat on open water—you may have to row a half-mile in order to run your punt ashore, and then step out to load in safety; and by the time you have done *this* the birds you hoped to gain a shot at are, perhaps, fled.

If you are stalking Geese with a breech-loader, and they rise out of range, and you look round for another chance of a shot and see, maybe, some Ducks, you can replace the cartridge containing large shot for one with duck-shot, *without* any fear of driving the birds away by showing yourself above the sides of your gunning-punt. On several occasions I have, too, fired a breech-loader at Ducks or Geese, and seen those of the company that flew away return, after a few gyrations, to settle among the dead and wounded, which, acting as decoys, enticed back their former companions. I have then rapidly thrust a charged cartridge into the gun, without rising from the recumbent position necessary when stalking fowl, and banged off a *second* shot *before* I proceeded to gather the result of the *first* one.

Such incidents are, I admit, rare; still, when they *do* occur, a breech-loader is invaluable.

The disadvantages of even the best breech-loading stanchion-guns are: their weight, difficulty of repair at short notice, great cost to purchase, and the expense of their cartridge cases, with the risk of being unable, in lonely localities, to procure a new supply of these as required, which may possibly be just when fowl are most abundant and tame.

LETTER XLI

HOW TO CHARGE THE CARTRIDGE CASES OF A BREECH-LOADING STANCHION-GUN

Cartridge Cases

The thick central-fire paper cases, as made by Messrs. Eley, are far superior to any metal ones at present invented. If, however, *light*, *thin*, and *durable* metal cases were to be had, that could be re-charged, these would be *perfection* for use in a breech-loading stanchion-gun.

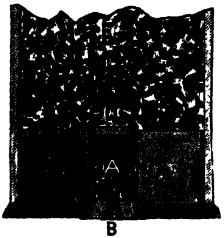


Fig. 18.—Section of the Base of a 1½-inch Cartridge Case for a Breech-loading Stanchion-Gun, showing proper System of Ignition

A. Cylinder containing fine powder.
B. Detonating cap.
C C. Thick felt wad, that surrounds and secures cylinder.
D. Small wad that retains fine powder in cylinder.
E. Main-charge.

To ensure an absolute certainty of ignition, the copper cap in the base of the case should be connected with a little tin cylinder [about the size of a ·250-bore pistol cartridge] that is full of *fine powder* (fig. 18).

If a case has to depend for ignition on a detonating cap *without* a small magazine of priming, then a *miss-fire* is always *possible*, even though you cover the cap with ¼ oz. of fine powder, previous to inserting the coarse grain composing the main charge.

APPLIANCES FOR CHARGING THE CARTRIDGE CASES OF BREECH-LOADING STANCHION-GUNS

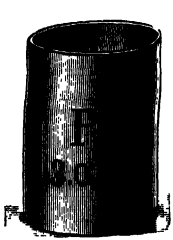


FIG. 19.—POWDER MEASURE

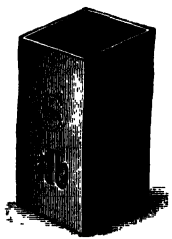


FIG. 20.—SHOT MEASURE

(I.) A *round* measure, of sheet copper, to hold the exact charge (by weight) of powder; its inside diameter ¼ in. less than the bore of the case (fig. 19).

(II.) A measure, of strong tin, 1¼ in. to 1½ in. *square*, to contain the correct amount (by weight) of shot (fig. 20).

N.B. The difference in shape, colour, and feel of these two chargers will prevent mistakes (easily made) in the routine of loading.

FIG. 21.—RAMMER FOR INSERTING, OR EXTRACTING, WADS

(III.) A round wooden rammer, an inch longer than the cartridge case and ¼ in. smaller in diameter than its bore. This should be fitted at one end with a fixed screw (protected by a cap when not in use) for drawing out wads (fig. 21).

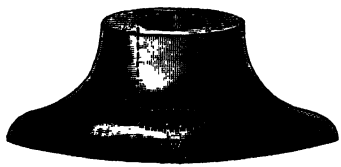


FIG. 22.—BLOCK TO HOLD CARTRIDGE CASE DURING PROCESS (

(IV.) A block of heavy wood, 4½ in. high, turned to a diameter of 6 in. at the base and 4 in. at the top.

A large hole down its centre (1 in. short of being through the block) to hold the cartridge-case for about a quarter of its length, and thus enable it to stand firmly upright during the process of charging.

A ½ in. in diameter hole through the block *below* the cap of the case (when the latter is in position in the block) to obviate *all risk* of explosion by jar as the wads are rammed down (I *have* known this occur), fig. 22.

You will find the block most convenient. It will save many a case, that stands tottering on the table, being tipped over, and the pound or so of shot you have just poured into it—but not, perhaps, wadded—being sent in a rattling shower over the floor.

POWDER, SHOT, AND WADS

To insert the powder and shot rapidly and without spilling, empty a couple of 1-lb. canisters of the former into one deep basin and a bag of the latter into another.

You can then quickly dip the measures in their respective basins and fill them to the brim as required.

Place a supply of thick felt wads on one side of you, and thin card ones on the other, so that you may readily pick them up as wanted.* A couple of soup plates are handy for this purpose.

* It is a very good plan to pile the wads in separate little columns on the table. Each column to consist of the proper number of wads for loading a case, the wads being placed, one above the other, in the order in which they should be inserted.

ORDER OF LOADING

I. Stand the cartridge case upright in the block shown in fig. 22.

II. Pour in a measure of powder. To make the powder rest evenly gently rap the base of the case a few times, an inch or so up and down, against the inside of the block.

Do not press the powder with the rammer, for the grains should be *loosely* rather than tightly packed. If the powder is compressed it will cake, and thus cause the gun to shoot irregularly and recoil heavily.

[When the cartridge is loaded you should be able to feel the powder 'crackle' if you squeeze its part of the case in your hand.]

III. A card wad ($\frac{1}{8}$ in. thick) over the powder . Fig. 23, 1
IV. A felt wad ($\frac{3}{8}$ in. thick) . . . . . ,, 2
V. A card wad ($\frac{1}{8}$ in. thick) . . . . . ,, 3
VI. Another felt wad ($\frac{3}{8}$ in. thick) . . . . ,, 4
VII. A card wad ($\frac{1}{8}$ in. thick) . . . . . ,, 5

VIII. Now pour in the load of shot. Tap that portion of the case that contains the shot smartly here and there, a good many times, with the wooden rammer. This tapping will cause the shot-charge to gradually settle till its pellets all lie snugly together. The gun will then shoot *much* better than if the shot was not properly condensed in the case.

IX. Press a card wad ($\frac{1}{8}$ in. thick) level and tight on the top of the shot (fig. 23, 6).

X. Remove the case from the block, hold it slantwise, and, as you revolve it, drop in sealing-wax, melted in a candle, all round the edges of the card wad just placed over the shot (fig. 23, A, B).

The wax will fix the wad securely to the sides of the case, so that no wet or handling can shift it.

If you bend down the top of the case over the outer wad, you cannot do so firmly enough to keep the shot-charge from shaking loose inside the cartridge.

The material of the case, if the latter is turned inwards at the top, whether by hand or instrument, will also be so creased that if you wish to reload or change the shot, you will find it difficult to put in the wads.

Again, if, as often happens, a little splash of water enters the muzzle of the gun, this will run along the barrel and soak the sides of the cartridge. If, however, the end of the case fits the barrel accurately, as it should when *not* turned down, the water will seldom progress farther than the wad over the shot.

XI. Print with a pencil on the top card wad of each loaded cartridge—G, for Geese—D, for Duck—P, for Plover—to tell you what size of shot it contains.

Cut a little nick with a file in the brass rim at the base of a case loaded for Duck or Wigeon; then at night, by running your thumb-nail round this part of the case, you can instantly select the cartridge you require.

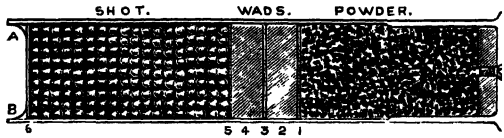


FIG. 23.—LOADED CARTRIDGE

N.B. Do not ram the wads over the powder with more force than is just necessary to seat them in position.

Mark, with a pencil or knife, circular lines at correct intervals round the rammer, to check your quantities when loading.

These lines should come, one after the other, level with the top of the case, in sequence with the proper height of the powder wads and shot after they are inserted. By noticing the position of these lines in relation to the top of the case, you will at once discover any error in loading.

Should the cases fit rather tightly in the barrel, rub them over with lard. The explosion of the powder, on firing the gun, will melt the lard, and thus enable you to extract the empty cases without difficulty.

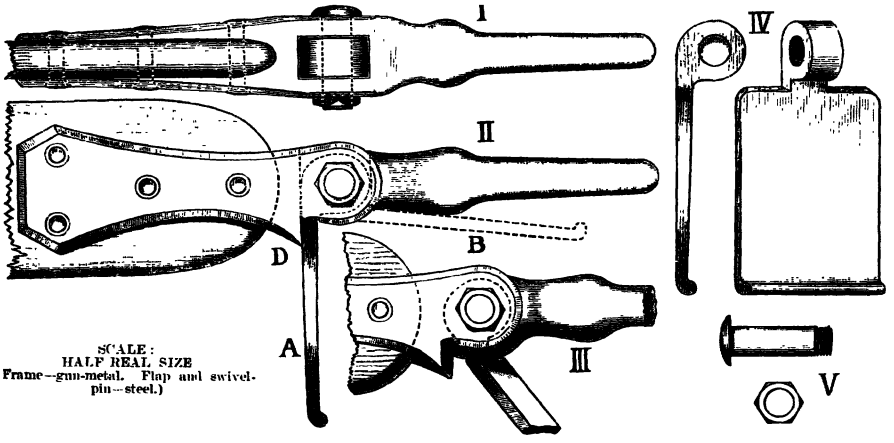


FIG. 23 (A).—EXPANDING POLE-HEAD FOR USE IN VERY SOFT OOZE OR SAND. Weight 1¼ lb.

I. Surface view.

II. Side view. A, shows the position of the hinged flap (checked by the projection D) when the pole is shoved *against* the water or ooze. B, indicates the position of the flap when the pole is drawn *through* the water, preparatory to the next push astern by the fowler.

III. Sketch plan of centre of pole-head, showing how the flap swings to or fro.

IV. The flap. Front and side view.

V. Pin on which flap swings.

NOTE.—Two flaps, opening and closing opposite each other, can easily be hinged to the same swivel-pin. In this case arrange their flat surfaces to work in line with the flat surfaces of the pole.

LETTER XLII

GUNNING-PUNTS: THEIR DIMENSIONS

Double-handed Punts

(1)

THE DIMENSIONS OF A DOUBLE-HANDED GUNNING-PUNT SUITABLE FOR TWO MEN, AND A STANCHION-GUN OF 160 TO 180 LBS.

Total length above (along deck)	23 ft.
Total length underneath (along floor)	22 ft. 5 in.
Extreme width across floor	3 ft.
Extreme width across deck (without fender-strip)	3 ft. 9 in.
Width of floor at 5 ft. from stem	2 ft. 4½ in.
" " " at 5 ft. from stern	2 ft. 2¼ in.
Width across deck (without fender-strip) at 5 ft. from stem	3 ft. 0¼ in.
Width across deck (without fender-strip) at 5 ft. from stern	2 ft. 9¾ in.
The sides, each flared out at most	4½ in.
Height (perpendicular) of stem	6 in.
Height (perpendicular) of stern	8½ in.
Rake of stem	3 in.
Rake of stern	4 in.
Length of fore-deck (stem to cockpit)	8 ft. 4 in.
Length of after-deck (stern to cockpit)	4 ft.
Greatest width across inside of cockpit	2 ft. 7 in.
Width across cockpit at its after-end	1 ft. 5 in.
Width across opening for gun-barrel at forward end of cockpit	1 ft. 2 in.
Height of wash-boards round cockpit—forward	4 in.
" " " " —aft	3 in.
Round of deck at gun-beam (i.e. at forward end of cockpit)	3½ in.
Height from floor to surface of deck at centre of gunbeam	11½ in.
Spring on floor, between stem and stern	1¾ in.
Round of floor athwartship, at its widest part	½ in.

Note

The widest part of the floor and of the deck of a gunning-punt should be at 1 ft. forward of her centre of length. The greatest amount of flare given to her sides should also be at this point.

(II)

THE DIMENSIONS OF A DOUBLE-HANDED GUNNING-PUNT SUITABLE FOR TWO MEN, AND A STANCHION-GUN OF 140 TO 160 LBS.* (BUILT IN LETTERS XLIII. XLIV)

Total length above (along deck)	22 ft. 7 in.
Total length underneath (along floor)	22 ft.
Extreme width across floor *	3 ft.
Extreme width across deck * (without fender-strip)	3 ft. 8 in.
Width of floor at 5 ft. from stem	2 ft. 4 in.
„ „ „ at 5 ft. from stern	2 ft. 2 in.
Width across deck (without fender-strip) at 5 ft. from stem	2 ft. 11 in.
Width across deck (without fender-strip) at 5 ft. from stern	2 ft. 9 in.
The sides, each flared out at most *	4 in.
Height (perpendicular) of stem	6 in.
Height (perpendicular) of stern	8 in.
Rake of stem	3 in.
Rake of stern	4 in.
Length of fore-deck (stem to cockpit)	8 ft. 2 in.
Length of after-deck (stern to cockpit)	4 ft.
Greatest width across inside of cockpit	2 ft. 6 in.
Width across cockpit at its after-end	1 ft. 4 in.
Width across opening for gun-barrel at forward end of cockpit	1 ft.
Height of wash-boards round cockpit forward	3½ in.
„ „ „ „ aft	2¾ in.
Round of deck at gun-beam (i.e. at forward end of cockpit)	3 in.
Height from floor to surface of deck at centre of gunbeam	11 in.
Spring on floor, between stem and stern	1½ in.
Round of floor athwartship, at its widest part	½ in

* *i.e.* at 1 ft. forward of centre of length.

(III)

THE DIMENSIONS OF A LIGHT, FAST, DOUBLE-HANDED GUNNING-PUNT SUITABLE FOR TWO MEN, AND A STANCHION-GUN OF 120 TO 140 LBS.

Total length above (along deck)	22 ft.
Total length underneath (along floor)	21 ft. 5 in.
Extreme width across floor *	2 ft. 10 in.
Extreme width across deck * (without fender-strip)	3 ft. 5 in.
Width of floor at 5 ft. from stem	2 ft. 2½ in.
" " " at 5 ft. from stern	2 ft. 0½ in.
Width across deck (without fender-strip) at 5 ft. from stem	2 ft. 8½ in.
Width across deck (without fender-strip) at 5 ft. from stern	2 ft. 6½ in.
The sides, each flared out at most *	3½ in.
Height (perpendicular) of stem	6 in.
Height (perpendicular) of stern	8 in.
Rake of stem	3 in.
Rake of stern	4 in.
Length of fore-deck (stem to cockpit)	7 ft. 10 in.
Length of after-deck (stern to cockpit)	3 ft. 10 in.
Greatest width across inside of cockpit	2 ft. 5 in.
Width across cockpit at its after-end	1 ft. 2 in
Width across opening for gun-barrel at forward end of cockpit	11 in.
Height of wash-boards round cockpit—forward	3½ in.
" " " " —aft	2¾ in.
Round of deck at gun-beam (i.e. at forward end of cockpit)	2¾ in.
Height from floor to surface of deck at centre of gunbeam	10¾ in.
Spring on floor between stem and stern	1½ in.
Round of floor athwartship, at its widest part	½ in.

* *i.e.* at 1 ft. forward of centre of length.

(IV)

THE DIMENSIONS OF AN EXTRA LARGE DOUBLE-HANDED GUNNING-PUNT SUITABLE FOR TWO MEN, AND A STANCHION-GUN OF 180 TO 200 LBS. (SUCH AS EASILY CARRIES MY 200-LBS. DOUBLE GUN, MY MAN, AND—MYSELF (16 STONE)).

Total length above (along deck)	23 ft. 6 in.
Total length underneath (along floor)	22 ft. 9 in.
Extreme width across floor *	3 ft. 2 in.
Extreme width across deck * (without fender-strip)	4 ft.
Width of floor at 5 ft. from stem	2 ft. 5⅝ in.
„ „ „ at 5 ft. from stern	2 ft. 3⅜ in.
Width across deck (without fender-strip) at 5 ft. from stem	3 ft. 1 in.
Width across deck (without fender-strip) at 5 ft. from stern	2 ft. 11 in.
The sides, each flared out at most *	5 in.
Height (perpendicular) of stem	7 in.
Height (perpendicular) of stern	9 in.
Rake of stem	4 in.
Rake of stern	5 in.
Length of fore-deck (stem to cockpit)	8 ft. 6 in.
Length of after-deck (stern to cockpit)	4 ft. 2 in.
Greatest width across inside of cockpit	2 ft. 9 in.
Width across cockpit at its after-end	1 ft. 6 in.
Width across opening for gun-barrel at forward end of cockpit	1 ft. 4 in.
Height of wash-boards round cockpit forward	4½ in.
„ „ „ „ —aft	3½ in.
Round of deck at gun-beam (i.e. at forward end of cockpit)	4 in.
Height from floor to surface of deck at centre of gunbeam	1 ft.
Spring on floor, between stem and stern	1¾ in.
Round of floor athwartship, at its widest part.	¾ in.

* *i.e.* at 1 ft. forward of centre of length.

SINGLE-HANDED PUNTS

(V)

THE DIMENSIONS OF A SINGLE-HANDED GUNNING-PUNT SUITABLE FOR ONE MAN, AND A STANCHION-GUN OF 80 TO 100 LBS.

Total length above (along deck)	18 ft. 5 in
Total length underneath (along floor)	18 ft.
Extreme width across floor *	2 ft. 6 in.
Extreme width across deck * (without fender-strip)	3 ft.
Width of floor at 4 ft. from stem	1 ft. 11⅜ in.
" " " at 4 ft. from stern	1 ft. 9⅜ in.
Width across deck (without fender-strip) at 4 ft. from stem	2 ft. 4¾ in.
Width across deck (without fender-strip) at 4 ft. from stern	2 ft. 2¾ in.
The sides, each flared out at most *	3 in.
Height (perpendicular) of stem	5½ in.
Height (perpendicular) of stern	7½ in.
Rake of stem	2 in.
Rake of stern	3 in.
Length of fore-deck (stem to cockpit)	7 ft. 8 in.
Length of after-deck (stern to cockpit)	3 ft.
Greatest width across inside of cockpit	2 ft.
Width across cockpit at its after end	1 ft. 2 in.
Width across opening for gun-barrel at forward end of cockpit	10½ in.
Height of wash-boards round cockpit—forward	3½ in.
" " " aft	3 in.
Round of deck at gun-beam (i.e. at forward end of cockpit)	2½ in.
Height from floor to surface of deck at centre of gunbeam	10½ in.
Spring on floor, between stem and stern	1½ in.
Round of floor athwartship, at its widest part	⅛ in.

* *i.e.* at 1 ft. forward of centre of length.

(VI)

THE DIMENSIONS OF A LIGHT, FAST, SINGLE-HANDED GUNNING-PUNT SUITABLE FOR ONE MAN, AND A STANCHION-GUN OF 70 TO 80 LBS.

Total length above (along deck)	18 ft. 3 in.
Total length underneath (along floor)	17 ft. 10 in.
Extreme width across floor *	2 ft. 4 in.
Extreme width across deck * (without fender-strip)	2 ft. 10 in.
Width of floor at 4 ft. from stem	1 ft. 9⅞ in.
,, ,, ,, at 4 ft. from stern	1 ft. 8⅛ in.
Width across deck (without fender-strip) at 4 ft. from stem	2 ft. 2½ in.
Width across deck (without fender-strip) at 4 ft. from stern	2 ft. 1 in.
The sides, each flared out at most *	3 in.
Height (perpendicular) of stem	5 in.
Height (perpendicular) of stern	7 in.
Rake of stem	2 in.
Rake of stern	3 in.
Length of fore-deck (stem to cockpit)	7 ft. 6 in.
Length of after-deck (stern to cockpit)	3 ft.
Greatest width across inside of cockpit	1 ft. 10 in.
Width across cockpit at its after end	1 ft. 1 in.
Width across opening for gun-barrel at forward end of cockpit	10 in.
Height of wash-boards round cockpit—forward	3½ in.
,, ,, ,, ,, —aft	3 in.
Round of deck at gun-beam (i.e. at forward end of cockpit)	2½ in.
Height from floor to surface of deck over centre of gunbeam	10 in.
Spring on floor, between stem and stern	1¼ in.
Round of floor athwartship, at its widest part	¼ in.

* *i.e.* at 1 ft. forward of centre of length.

NOTES ON GUNNING-PUNTS

A reasonably long and narrow gunning-punt is always to be preferred to one a foot or so shorter and of some few inches wider beam, though the latter has the same carrying capacity as the former.

The long narrow punt is the faster; is the easier to sail or propel; and, above all, *steers closer to the wind*; she also affords a larger amount of space to lie down in when you are stalking fowl.

A short, broad punt is slow and heavy to work and steer, and, from not having so much grip of the water as the longer craft, is more affected by a side-wind.

The long narrow punt, from its wedge-like form, can, under all circumstances, be pushed ahead with less labour than the shorter and broader one, and as she holds her 'steerage way' the best, she is the least difficult of the two to keep moving in a direct course. If you happen to be stalking fowl against a small head sea, the long narrow craft will cut her way, steadily, on an even keel, through the ripple, and thus allow you to keep the big gun level on the birds as you draw near them. On the other hand, the short broad punt will rise and fall with every little wave, and hence constantly pitch the gun off the mark.

In the dimensions given it will be seen the rake of the stem and stern is, in each punt, considerable. This rake of the extremities enables the flare of the sides to be carried, with but slight reduction, from end to end of the punt, and thus plenty of *buoyancy* is obtained, especially where most needed, i.e. below the gun.

A rather short after-deck is an advantage in a double-handed gunning-punt, as, by lengthening the cockpit, it bestows plenty of room on board, and—a most important matter—allows the puntsman, when stalking fowl, to lie well *aft* in the punt.

In this position he can fairly utilise his arms in poling, paddling, or sculling up to fowl, for the nearer to its stern he is able

to lie down, the greater the force he can apply in propelling and directing the punt.*

Water will seldom wash over the after-deck into the cock-pit if the former has the after-ends of the wash-boards fixed thereon in the manner shown in the various sketches.†

Fixed wash-boards on the after-deck are, besides, convenient for temporarily enclosing any small articles required for immediate use, such as a few cartridges, the field glasses, or even the anchor and chain, and they will protect the fowler from being slopped by spray when he employs this part of his punt as a seat.

The 'trim' of a gunning-punt is a *very* serious consideration, for unless accurately 'trimmed,' she cannot, in a beam wind, be poled, paddled, or rowed without continually falling away to leeward.

A punt with this defect is unmanageable, vexatious, and useless.

A gunning-punt, with gun, crew, and *all* her belongings aboard, should take the water the entire length of her floor, and float light and true, neither down by the head nor the stern. This she will do *if* the weights she carries are evenly distributed, and are also adapted to her size.

The heavier the stanchion-gun, the farther aft will you require the gun-beam, and, of course, the longer will the fore-deck of your punt be; yet a *couple of inches* one way or the other will often make *all* the difference in her 'trim' afloat.

If the gun is a trifle forward of its proper place the stem of the punt will be too deeply immersed. If the gun is rather far aft, the punt will be too low by the stern, her stem will be slightly out of the water, and she will sheer off from, instead of looking up into, the wind, when shoved through or against it.

If you desire a gunning-punt of perfect manners, do not finally

* For this reason a high stern-piece is necessary so as to give the requisite space below the after-deck for the puntsman's legs and feet.

† If you are compelled to suddenly shove your punt astern in a bit of wave (as will often occur) you will find that fixed wash-boards on the after-deck prevent many a bucket-full of water slopping on board.

decide on the position for the big gun till you have *proved by experiment* it is one that will give the punt a correct 'trim' afloat.

If, with the *gun, gun-beam* and *decks* temporarily fitted, *crew*, and *all weights* on board, you are able to easily pole your new punt in a stiff side-wind *straight on a mark*, you may rest content, and finally fix upon the position for the gun.

If, however, you cannot hold the punt up to the wind, or keep her out of it, without a deal of trouble, you will probably, to set her right, have to shift the gun and gun-beam from three to six inches either fore or aft.

THE EXACT POSITION OF THE CRUTCH (ATTACHED TO THE GUN-BEAM), THAT SUPPORTS THE WEIGHT OF THE STANCHION-GUN IN A GUNNING-PUNT, IS THE 'FEATHER THAT TURNS THE SCALE' BETWEEN A LIVELY OBEDIENT CRAFT AND A HEAVY OBSTINATE LOG IN THE WATER!

The measurements of the gunning-punts given are the outcome of long personal experience, and could not be improved on for general service. If, however, the waters you shoot over are *very* smooth and sheltered you may reduce the curve of the gun-beam 1 in. in each of the double-handed punts, and ¾ in. in the single-handed ones. If, on the other hand, you practise fowling on a rough exposed estuary, add, instead of deducting, these amounts to the round of the respective gun-beams.

Remember that the lower your punt the *less noticeable* she is to *fowl* when you are stalking them, and hence the more likely you are to obtain shots.

It is impossible to build a gunning-punt that is a *good* sea-boat, and with which you can stalk within firing-range of shy fowl; for if designed to weather tempestuous water, she will not only be desperately hard to manipulate, but far too large and conspicuous to successfully kill Geese and Ducks from.

NOTE.—Mr. Pickett, of West Quay, Southampton (yacht and boat builder), can probably turn out a better gunning-punt than anyone else in our Islands. Mr. Pickett is a zealous and experienced stanchion-gun shooter, and has constructed the author's gunning-punts for many years.

LETTER XLIII

HOW TO BUILD A GUNNING-PUNT

GENERAL DIRECTIONS

I. Whenever wood touches wood, whether knee, timber, plank, or strip, invariably coat *both* surfaces, before fixing, with thick red-lead paint. If not thus treated, these parts will soak and decay by reason of water lodging where it cannot escape or dry.

II. When the word 'nail' is used in the building directions, this implies *copper* boat-nails *only*.

III. 'Screws' *brass* ones *only*.

IV. The nails *all* to be driven in from the *outside* of the punt and carefully riveted over roves *inside*. (Clouted nails do not answer.)

V. The heads of *all* nails and screws to be countersunk (a twist with one corner of a gouge will do this) $\frac{1}{16}$ in. *below* the surface of the wood, and then levelled over smooth with putty *before* painting operations. This will obviate all chance of their causing leaks.

VI. Never drive a nail in without first boring a hole that fits it (rather tightly).

VII. Dip the thread of every screw, before twisting it home, into a little pot of grease.

N.B. Above all, from first to last, do not allow a particle of metal except *copper* or *brass* to be worked into any portion of the punt.

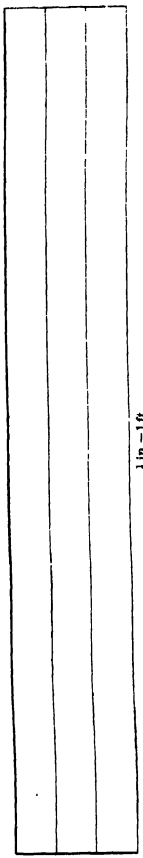


FIG. 24.—THE THREE FLOOR-PLANKS

¼ in. = 1 ft.

THE DIRECTIONS FOR BUILDING APPLY TO ANY GUNNING-PUNT, LARGE OR SMALL. HAVING SELECTED FROM THE LAST LETTER THE STYLE OF PUNT YOU DECIDE TO CONSTRUCT, YOU CAN THEN WORK TO ITS DIMENSIONS.

IN THIS CASE, AS IT IS A USEFUL SIZE OF CRAFT, WE WILL BUILD No. II, p. 494.

ORDER OF CONSTRUCTION

(1.) Procure three straight, well-seasoned, ¾ in. thick, yellow-pine planks, of the same length and collective width as the floor of the punt should be. Make sure they are without a knot, shake, or split in any part of them.

Plane both surfaces of each plank smoothly down till its original thickness of ¾ in. is reduced to ⅝ in.

Also plane their edges square and true, so that they come in close contact their entire length when the planks are laid side by side.

Place the three planks together on a level floor as shown in fig. 24.

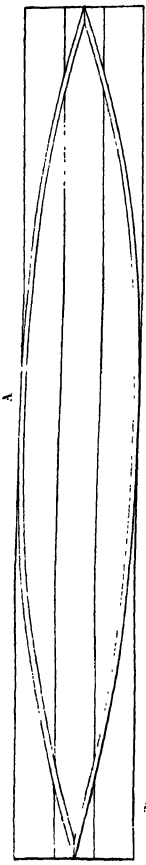


FIG. 25.—STRIPS TEMPORARILY NAILED TO PLANKS TO GIVE THE CORRECT OUTLINE OF THE FLOOR OF THE PUNT
N.B.—The widest part of the floor is across at A—B: i.e. 1 ft. forward of centre of length

(2.) Cut two strips of fir, each 1¼ in. square and about 1 ft. longer than the planks. Bend the strips close down along the planks till the outside edges of the strips give the correct dimensions and shape of the floor of the punt (fig. 25). The strips whilst being adjusted to, and when they represent, the proper outline of the floor, can be temporarily held in place by a few light nails driven through them ¼ in. into the planks.

Be careful, in order to gain buoyancy in the punt, and carrying power for the big gun, that your outline does not curve too sharply from A and B (i.e. at 1 ft. forward of the centre of length) to the stem.*

On the side of A and of B, that is *next the stem*, keep the outline as *full* as you can; that is to say, with as little round as possible consistent with a regular curve. From A and B to the stern, the outline should not be so full as it is from A and B to the stem (see widths at 5 ft. from stem and stern given in building dimensions).

* As our punt (in order that she may carry the gun easily, and float evenly in the water when her crew are aboard) requires to be broader forward than aft, we have to place her extreme width 1 ft. in front of her centre of length. If this is not done it is impossible to give her outline a true and nicely rounded curve from end to end.

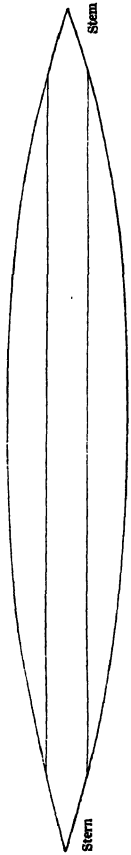
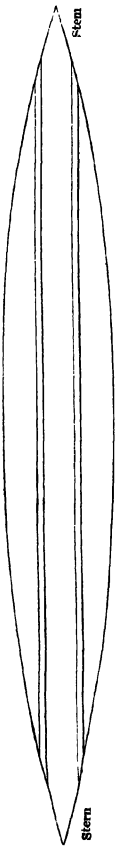


FIG. 26.—FLOOR OF PUNT CUT OUT TO SHAPE AND SIZE

$\frac{1}{2}$ in. = 1 ft.

(3.) Run a lead pencil round the outer edges of the strips shown in position in fig. 25.

Remove the strips, saw straight up and down through the pencil marks, and the floor of the punt will then be cut out to dimensions (fig. 26).



I

¼ in. = 1 ft.

FIG. 27.—LONGITUDINAL (I) AND SECTIONAL (II) VIEW OF THE THIN STRIPS OVER THE JOINTS OF THE FLOOR

II

(4.) Lift the floor of the punt off the ground and arrange it on five firm level trestles, 3 ft. high, with broad solid tops. Prepare two strips of yellow pine, respectively ¼ in. thick and 2 in. wide, their lengths being the same as the joints of the floor-planks.

By the aid of wedges, or screw cramps, applied at their ends and centre, squeeze the three planks tightly together. With thin nails (4 in. apart) firmly fix the long strips over the whole length of the floor-joints, each strip in *one* piece. This will prevent *all* chance of *leaking* at the joints of the planks (I, II, fig. 27).

Previous to securing the strips, coat, with thickly-mixed red-lead paint, the joints between the floor-planks, the under-surface of the strips, and the part of the floor the latter cover when fixed.

FIG. 28.—FLOOR-TIMBERS FIXED
¼ in. = 1 ft.

(5.) Cover the floor of the punt, twice, with red-lead paint, giving it at least three days to dry between the two coats.

In the meantime shape the floor-timbers, which cut from straight-grained ash or oak.

The timbers can be ¾ in. wide on their surface and 1¼ in. deep.

The timbers will have to be a trifle (from ¼ to ½ in.) curved underneath from their centres up to their ends, in order that, when fixed, their united strength may force the floor to a slight round athwart-ships (fig. 29).

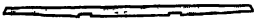


FIG. 29.—A FLOOR TIMBER, SHOWING ITS CURVE AND THE OPENINGS CUT TO ALLOW IT TO FIT OVER THE FLOOR-JOINT STRIPS

Each timber will require two openings, 2 in. long by ¼ in. deep, on its under-surface, to enable it to fit close down to the floor over the long strips that cover the floor-joints (fig. 29).

Fix the timbers (three nails to each plank) across the floor of the punt from stem to stern (fig. 28). The timbers to be 1 ft. apart from centre to centre.

The ends of all the timbers to be 2 in. short of the outside edges of the floor (fig. 28).

FIG. 30.—STEM-PIECE

(6.) Shape the stem out of sound and dry English oak (fig. 30).

The stem can be 3 ft. 6 in. long over-all, and 5 in. wide previous to being shaped. Its height according to building dimensions.

The end of the centre floor-plank fits into the stem underneath. The ends of the side-planks fit into its sides, which are sloped to receive them. The end of the centre deck-plank fits down on its surface.

It will be seen the stem is 'stepped' all round so that the various planks named can not only be screwed flush with it, but also with their ends square against it (fig. 30).

The transverse openings on the under-surface of the long part of the stem fit over three of the floor-timbers.

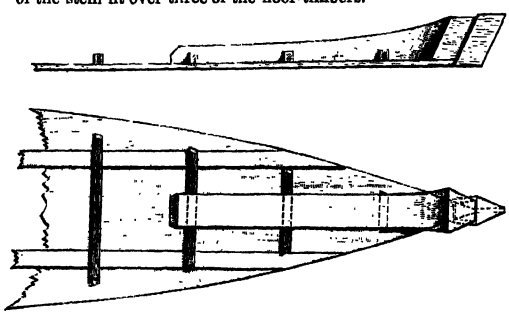


FIG. 31.—STEM-PIECE FIXED TO FLOOR (Surface and side-view)

In these various ways great strength is gained, which is most necessary, as the stem is the very key-stone of the punt and has to bear most of the recoil of the big gun.

To fix the Stem.—Saw 4½ in. in length square off the stem-end of the floor of the punt. Fit the stem down to the floor, over three timbers, with the squared end of the floor tight up against the underneath step of the stem-piece (fig. 31).

The under-part of the stem-piece which projects beyond the floor, when the two are attached, should be 4½ in. long, so that shortening the floor 4½ in. will not affect its total length.

Secure the stem to the floor with three, 2½ in. long, strong screws into its thicker part near the floor-end, and with half a dozen $\frac{3}{16}$ in. copper bolts, well riveted, through its long sloping portion.

Previous to fitting the stem, coat its under-surface with thick red-lead paint.

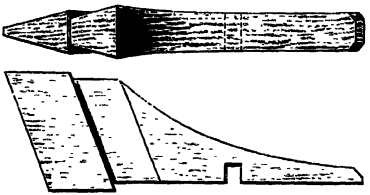


FIG. 32.—STERN-PIECE (Surface and side view)

(7.) The stern-piece, oak, having no recoil to take, need only be 2 ft. in length.

It will have to be cut with sunk surfaces and square steps to suit the ends of the different planks, precisely like the stem-piece (fig. 32).

FIG. 33.—STERN-PIECE FIXED TO FLOOR

Fix the stern-piece to the floor of the punt, with strong screws and bolts, in the same manner as the stem-piece was secured (fig. 33).

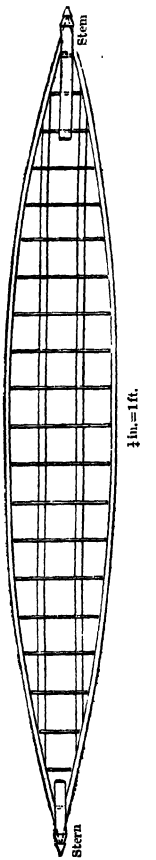


FIG. 34.—FLOOR-EDGE STRIPS FIXED FOR NAILING SIDES TO.

(8.) Prepare two strips of yellow pine, to go all round the floor-edges of the punt, one on each side. The strips to be sloped on one face; their dimensions, 1½ in. wide underneath, 1¼ in. across upper surface, and 1¼ in. high. (A, fig. 35.)

Fix these strips level with the edges of the floor (figs. 34, 35), and mortise their ends into the stem and stern in the manner shown in fig. 42, p. 515.

FIG. 35.—SECTION OF ONE SIDE OF FLOOR, SHOWING FLOOR-EDGE STRIP (A)

Be careful to drive the nails that fasten these strips at ½ in. only from their inner edges. If the nails are driven through the centre of the strips they are liable to be cut into when the floor-edges are sloped to take the side-planks.

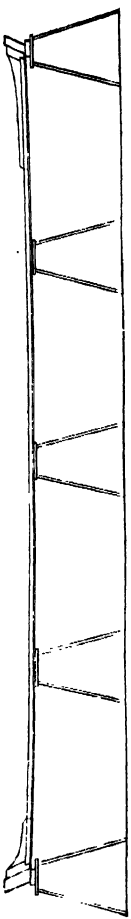


FIG. 36.—FLOOR PROPPED UP AT STEM AND STERN TO GIVE SPRING FORE AND AFT
$\frac{1}{2}$ in. = 1

(9.) Prop up each end of the floor, where it rests on the outermost trestles, 1½ in. (or whatever the spring fore and aft has to be)

You can do this by inserting two little pieces of hard wood, one under the point of the stem, and one under the point of the stern (fig. 36).

We want as little spring fore and aft or round athwartships, on a punt's floor as possible, but we must have *some*. If as flat as a box outside, a punt will have no life, rowing, poling, or sailing, and if she runs aground will adhere to soft mud like a flatfish, and plough her stem into it if you then try to push her forward.

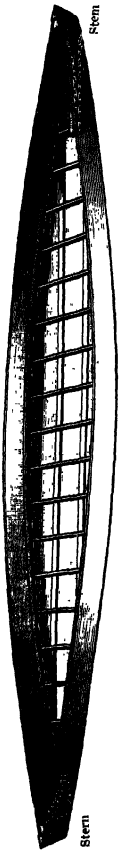


FIG. 37.—PUNT WITH SIDES FIXED

(10.) Fixing the sides comes next.

To do this the edges of the floor and the strips just nailed to them will require to be planed together to the proper slope to receive the side-planks.

Commence by cautiously planing the floor-edges and their strips for a short space amidships till you finally acquire—at a point 1 ft. forward of their centre of length—a slope that agrees with the flare outwards the sides should have at this part of the punt. (*Vide* building dimensions.)

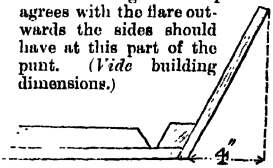


FIG. 38. HOW TO TEST SLOPE OF FLOOR-EDGES AND FLOOR-EDGE STRIPS PREVIOUS TO FIXING SIDE-PLANKS. THE DOTTED LINES REPRESENT YOUR CARPENTER'S RULE IN VARIOUS POSITIONS OF REFERENCE

You can test the slope (supposing it to be, for instance, 4 in.) as shown in fig. 38.

Having obtained the correct slope for the sides at a foot forward of the centre of length of the punt (where it should be the greatest), gradually and slightly decrease the slant of the floor-edges and their strips from thence to the stem and stern, which are, of course, also sloped at their sides to match the, here reduced, flare of the side-planks.

The side-planks may next be prepared, and should each be

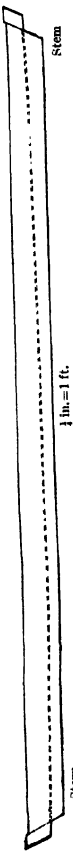


FIG. 38.—A SIDE-PLANK TEMPORARILY FITTED. THE LOWER DOTTED LINE SHOWS ITS UNDER-PART THAT WILL BE SAWN OFF

in *one* piece of smoothly planed yellow pine, ¾ in. thick.

Having seen that these two side-planks lie closely, all along, to the sloped edges of the floor, and floor-edge strips, you may next saw off their ends so that they fit into the recesses in the sides of the stem and stern. The top edges of the planks at their ends to be flush with the cut-away surface of the stem and of the stern, and in a *straight* line from the stern downwards to the stem (figs. 39, 40).

You may have to move the planks many times in and out of position before they come tight against the floor-edges and strips, which will probably require a little sloping or straightening here and there to humour the planks.

Be careful that you obtain the proper width across the punt from the top of one side to the top of the other at 1 ft. forward of its centre of length (i.e. extreme width of deck). Also ascertain that the width at 5 ft. from the stem and stern agrees with your building dimensions.

All being at length correct, lightly nail the side-planks, here and there, to the stem and stern, floor-edges, and floor-edge strips. This will keep them in place whilst you saw off, level with the outside of the floor, the parts of the planks that project below (fig. 39).

Finally, fasten the side-planks, now shaped and fitted, to the floor-edges and floor-edge strips, with long thin screws into the former, and with riveted nails through the latter (fig. 37).

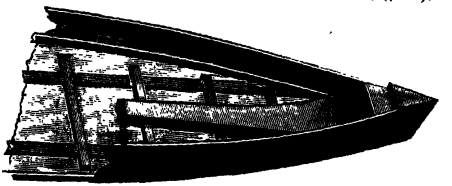


FIG. 40. HOW ENDS OF SIDE-PLANKS ARE FIXED TO STEM-PIECE AND STERN PIECE

The ends of the side-planks where they fit into the sloping sunk surfaces at the sides of the stem and stern to be firmly screwed in flush (fig. 40).

Previous to fixing the sides coat between their lower edges and the floor-edges and floor-edge strips with thick red-lead paint. Treat their ends at the stem and stern in the same way.

All will now be as in fig. 37.

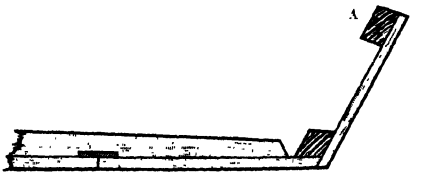


FIG. 41.—SECTION OF ONE SIDE OF PUNT SHOWING STRIP (A) FIXED AT TOP OF SIDE-PLANK (see also FIG. 42)

(11.) The side-planks being screwed at their ends to the stem and stern, and their lower edges fastened to the edges of the floor, and to the floor-edge strips, we have now to nail all round each side-plank—from stem to stern, and level with its top edge inside—a strip of yellow pine $1\frac{3}{4}$ in. deep by $1\frac{1}{4}$ in. wide (fig. 41, A).

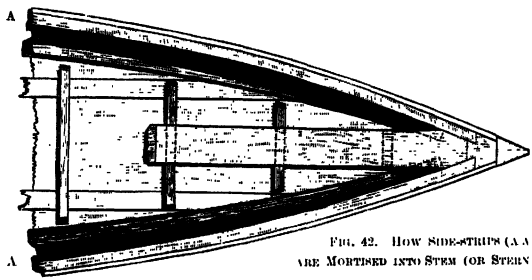


FIG. 42. HOW SIDE-STRIPS (A A) ARE MORTISED INTO STEM (OR STERN)

Mortise the ends of these two strips (A A), 1 in. deep, square into the stem and stern (fig. 42).

(12.) Our next job is to strengthen the sides, and attach them to the punt's floor, with knees. Whilst these knees are being shaped (as shown in fig. 48) give the sides, inside, two good coats of red-lead paint.

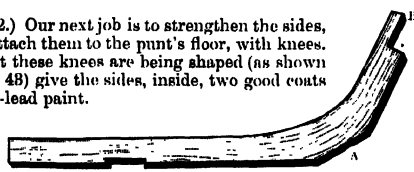


FIG. 43.—SIDE-PLANK KNEE, SHAPED TO THE SLOPE OF THE SIDE, AND CUT, AT A, TO PASS OVER AND SLIGHTLY INTO (⅛ in. deep) THE FLOOR-EDGE STRIP.* THE OPENING UNDER THE LONG PART OF THE KNEE FITS OVER THE FLOOR-JOINT STRIP ON ONE SIDE OF THE PUNT'S FLOOR. THE STEP, B, AT THE TOP OF THE KNEE IS MORTISED IN NEARLY FLUSH WITH THE STRIP (A, fig. 41) JUST FIXED AT THE TOP OF THE SIDE PLANK, AND TO WHICH IT IS NAILED (fig. 44)

The small opening under the bend of the knee near the floor-edge strip, fig. 44, allows water to run down from the stem or stern of the punt to its centre, where it can be bailed out.

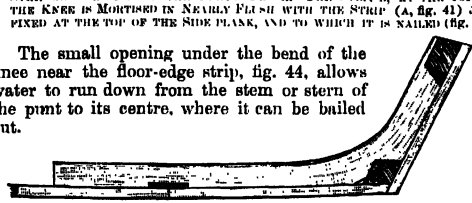


FIG. 44.—SECTION OF ONE SIDE OF PUNT, SHOWING A SIDE-PLANK KNEE FITTED

* If a knee is cut out *square*, i.e. stepped, at the angle of the floor and sides, so that it may fit exactly over the floor-edge strip, this is a source of weakness. If, however, a knee is merely *sloped* at its bend underneath, and is then fitted as shown in fig. 44, it will never give way.

FIG. 45.—KNEES FIXED TO SIDE PLANK AND FLOOR

The knees, fig. 43 (ash, cut with the natural curve of the grain) are nailed to the sides, to the floor of the punt, and to the timbers (fig. 45).

The ends of the long parts of the knees should meet at the centre of the floor. The knees to be ¾ in. wide on their surfaces, and, when fixed, the same height above the floor as the floor-timbers (i.e. 1¼ in.).

Fix a pair of knees, one opposite the other, alongside each floor-timber, and all will be as in fig. 45.

NOTE

Knees grown to, or bent by steaming with, the grain of the wood, are to be obtained, in the rough, through any boat-builder.

LETTER XLIV

HOW TO BUILD A GUNNING-PUNT
(continued and concluded)

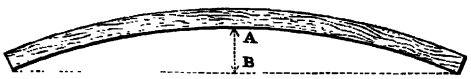


FIG. 46.—HOW TO MARK OUT THE CURVE OF THE GUN-BEAM

(13.) The side-planks and their knees being fastened, we have now to consider the supports for the stanchion-gun and the decks. First saw out the gun-beam (fig. 46), which, as it bears the weight of the gun, will have to be very strong, and also very firmly fixed in the punt. The gun-beam can be of ash or elm. Its width across surface 3½ in.; its depth 2½ in. (afterwards reduced at each end to 1¾ in., as shown in fig. 49, and in fig. 56, p. 525).

The curve of the gun-beam will be from 2½ in. to 3½ in., according to the size of the punt you are building. The curve of this beam gives the round of the deck at its part of the punt, i.e. at the after-end of the fore-deck.

The space between the under-surface of the gun-beam (at its centre of length) and a line connecting its ends will represent its curve (see dotted line A B, fig. 46).

The height from the upper surface of the gun-beam, at its centre (D) to the floor of the punt will vary from 11 in. in a double-punt to 10 in. in a single-handed one.

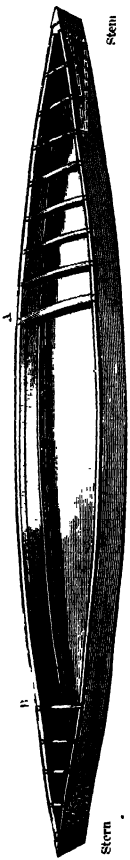


FIG. 47.—PUNT WITH GUN BEAM (1), AFTER DECK BEAM (II), AND DECK-RAFTERS FIXED
(Knees and timbers omitted for clearness)

FIG. 48.—GUN-BEAM, SHOWING STEPPED (BUT NOT YET REDUCED) ENDS

Cut a step in each end of the gun-beam, the upper or protecting parts of the steps being 1¼ in. long by 1 in. deep (fig. 48).

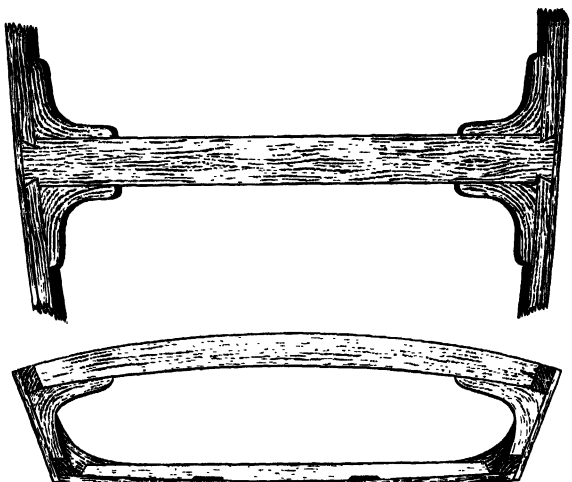


FIG. 49.—SURFACE AND SIDE VIEW OF GUN-BEAM WHEN FIXED, 1 in.=1 ft.
(Side-knees omitted in side-view for clearness)

Reduce the *under-surface* of the gun-beam—commencing at 1 ft. on each side of its centre till its ends are each 1¾ in. deep, i.e. the same depth as the strips along the top of the sides (fig. 49).

Dovetail the projecting ends of the gun-beam their full depth, 1 in., into the side-strips (fig. 49).

Further strengthen the gun-beam from all chance of moving by a strong upright knee underneath each of its ends, as well as by a longitudinal one at either side of its ends (fig. 49).

Fix the after-deck beam (yellow pine, 2½ in. wide on surface, by 1¾ in. deep) level with the fore-end of the after-deck, securing its ends as you did those of the gun-beam (B, fig. 47).

Now prepare the deck-rafters (yellow-pine) seven to the fore-deck between the gun-beam and the stem, and three to the after-deck between the after-deck beam and the stern.

The deck-rafters and the after-deck beam all correspond in their curve with that of the gun-beam. Fasten a cord to a tack driven flush in the top of the end of the stern. Run the cord over the top of the centre of the gun-beam, and stretch it tight to another tack in the top of the end of the stem.

The top of the arch of the after-deck beam and of each deck-rafter should then just touch the cord.

Dove-tail the ends of the deck-rafters, which are to be stepped like those of the gun-beam, 1 in. deep, into the strips that are nailed to the top edges of the sides. The deck-rafters can be 1¼ in. wide and 1¾ in. deep.

The punt will now be as in fig. 47, p. 518.

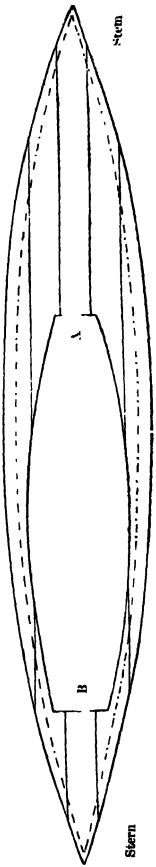


FIG. 50.—SURFACE VIEW OF PUNT SHOWING DECK-PLANKS FIXED

$\frac{1}{4}$ in. = 1 ft.

(14.) The decks to consist of eight, $\frac{3}{4}$ in. thick, larch planks. Fig. 50 shows these screwed down to the gun-beam, the after-deck beam, the deck-rafters, and the strips that surround the top edges of the sides. The straight longitudinal lines indicate the joints of the deck-planks and give their respective shapes.

The centre deck-planks, at their outer ends, are fastened flush into the, $\frac{3}{4}$ in. deep, sunk surfaces of the stem and stern.

The opening shown in the centre of the deck, from A to B, is the cockpit, which is terminated at its forward end (A) by the gun-beam, and at its after end (B) by the after-deck beam.

The cockpit can be at first roughly shaped, and its proper outline afterwards obtained by bending long thin strips from gun-beam to after-deck beam (much in the same way as the floor was marked out, fig. 25, p. 504).

The width of the cockpit at the gun-beam (A) (i.e. between the wash-boards not yet fixed) is about 1 ft. in a double-punt, and 10 in. in a single-handed one. Its width aft, at the after-deck beam (B), from 16 in. to 18 in. in a double and about 14 in. in a single punt (*vide* Building Dimensions).

The extreme width of the cockpit will be in relation to the size of the punt.

Previous to fastening the decks give them two coats of red-lead paint underneath.

The punt is now as in fig. 50.

FIG. 51.—SECTION OF SIDE OF PUNT SHOWING A SIDE-DECK KNEE FIXED (A)

(15.) The side-decks opposite the cockpit (from the gun-beam to the after-deck beam), as they have no rafters to rest on, require to be supported with some, $\frac{3}{4}$ in. thick, elm or ash knees. One of these deck-knees can be placed half-way between every side-plank knee for the length of the cockpit. The upper ends of the side-deck knees, as shown in fig. 51, should be 1 in. short of the inner edges of the side-decks.

. 52.—A SIDE-DECK KNEE

[To be fitted at its outer angle (A) over, and partly into, the strip at the top of the sides, in much the same manner as the side-plank knees are fixed above the floor-edge strips (fig. 51)].

FIG. 53.—SECTION OF SIDE OF PUNT SHOWING ONE OF THE STRIPS (A) FOR FIXING WASH-BOARDS TO

(16.) As a means of fastening the wash-boards round the cock-pit, nail to the inner edges of the side-decks underneath, from gun-beam to after-deck beam, two, $\frac{3}{4}$ in. square, strips of yellow pine, a strip to each side (fig. 53, A). The ends of these strips to be mortised, $\frac{1}{2}$ in. deep, into the gun-beam and after-deck beam.

(17.) Obtain some unbleached calico, let this be well washed in clean hot water (to shrink it) and afterwards ironed.

Brush over the decks of the punt with light grey paint. When the paint is dry cover the decks with a *thickly mixed* coat of the same colour, then at once stretch the calico [in one piece] flat and smooth to the wet paint, over every part of the upper surface of the punt from point of stem to point of stern. After stretching the calico tightly over the decks and rubbing it down level (it should stick closely to the paint), tack it all round the gunwale of the punt at $\frac{1}{2}$ in. below the joints of the side-planks and the decks, and then cut off the superfluous material. Also tack the calico to the under-sides of the 1 in. square strips (fig. 53, A) fixed below the edges of the cockpit.

This covering will preserve and strengthen the decks, keep them watertight, and give all the upper surface of the punt the desirable dull unreflecting appearance that painted wood never bestows.

FIG. 54.—PUNT WITH THE WASH-BOARDS FIXED

(18.) The upright wash-boards round the cockpit, one on each side, come next. They may be shaped as in fig. 55.

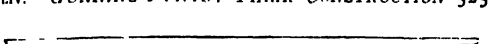


FIG. 55.—OUTLINE OF A WASH-BOARD (ASH)

The lower projecting part, A to B, is 1½ in. deep. The short step, near B, is 6 in. long and rests over the gun-beam. The long step, near A, rests on the after-deck beyond the after-deck beam, and may be 2 ft. in length in double punts, and 18 in. in single ones.

Screw the parts of the wash-boards that project downwards, between A and B, to the strips nailed round the under edges of the cockpit (*fig.* 53, A).

Bend together the long steps of the wash-boards to the centre of the after-deck, and here fix them in position with six small ash knees, three on each side of the deck (fig. 54).

Fix two similar knees over the gun-beam to secure the forward ends of the wash-boards, and a couple more knees should be fastened to the wash-boards on either side of the punt along the side-decks (fig. 54).

The height of the wash-boards *above* the decks is usually 3½ in. at the gun-beam, decreasing to 2⅜ in. at the after-deck beam. Their substance ⅜ in.

The punt will now be as in fig. 54.

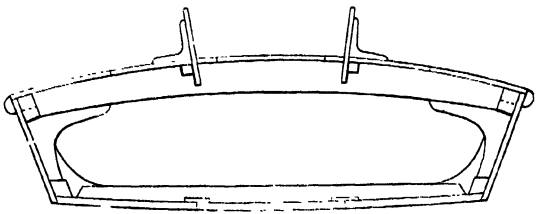


FIG. 56.—SECTION OF PUNT AT GUN-BEAM SHOWING FENDER-STRIPS TO GUNWALE AND OTHER BUILDING DETAILS. 1 in. = 1 ft. (No. II. p. 494.)

(19.) Fasten all round, and level with, the top edges of the sides of the punt outside, from point of stem to point of stern, one piece to each side, two strips of elm or oak, 1½ in. deep by ¾ in. thick. Round, with a plane, the strips on their outer surfaces

before fixing. Screw them, with long thin screws placed 6 in. apart (at ½ in. below the top of the side-planks), through the side-planks to the side-strips inside the punt (fig. 56).

These fender-strips will save the gunwale of the punt from damage by knocks and friction, will hide the joints of the side-planks and decks, and conceal and make secure the edge of the calico, here tacked down and cut off, that covers the decks.

(20.) With thin small-headed nails tack on a covering of light sheet copper for a length of 3 ft. aft from the point of the stem, and of course over the stem and deck from side to side.

The after-end of the copper should terminate above one of the deck-rafters to which its edge can be firmly screwed along through the deck.

This copper will save the stem, and the deck near it, from being charred by the flash of the gun.

(21.) Tack a strip of sheet copper, 3 in. wide, over the gun-beam between the fore-ends of the wash-boards to protect this part of the deck from damage by occasional contact with the barrel of the stanchion-gun.

(22.) The, ½ in. wide, cut-water of the stem and stern will each require to be protected from injury by an upright, ¼ in. thick, band of copper. If these bands overlap the stem and stern 3 in. both above and below, and are well screwed, they will never move (fig. 73, p. 546).

(23.) We now have to fit (not fix) four long, ½ in. thick, fir boards to the size and shape of the floor under the cockpit. These boards are not joined together but merely rest on the floor-timbers from side to side of the punt, and should extend 1 ft. aft of the after-beam, under the after-deck, and 2 ft. forward of the gun-beam, under the fore-deck.

The two outer boards will each have to be sawn to a curve on one edge to match the round of the sides; they will also require little openings cut in their curved edges where these come against the side-plank knees, else they will not fit up to the

sides of the punt. The flooring-boards will save the floor of the punt from damage and afford a level surface to stand or lie down on.

The boards will have to be *loosely* fitted, ¼ in. apart, so that, one or all, they can be *easily* lifted for cleaning or bailing the punt. (Fig. 82, p. 558.)

Each board will need, athwart its under-side, strips of ash or elm (2 in. wide by ⅜ in. thick) to keep it from warping, or splitting from pressure of the foot.

Fix these cross strips 1 ft. apart, and arrange that they come, when the boards are in position, between the floor-timbers.

(24.) It is probable there are some slightly open joints on the outside of the punt between the various planks. In such case turn the punt over, with her decks downwards. By means of a light mallet and fine chisel or little piece of tin, tightly pack any open joints, however narrow, with soft oakum. The oakum to be well frayed out and then twisted into loose, cord-like, lengths which should be soaked in thick red lead paint as they are being inserted in the joints.

(25.) To complete the punt give her two coats of red lead paint on every part inside [including the flooring-boards] which you can reach with a paint brush.

Three coats of pearl grey (the colour of a Kittiwake's back) on decks and sides. Three coats of red lead on the outside of her floor.

Allow *at least* ten days for drying between each application.*

ANY AMATEUR OR PROFESSIONAL BOAT-BUILDER WHO IS UNABLE TO CONSTRUCT A FIRST-CLASS GUNNING-PUNT BY FOLLOWING THESE SIMPLE DIRECTIONS IS DEFICIENT IN BRAINS OR IN ORDINARY MANUAL DEXTERITY.

* If she receives fair treatment; is carefully constructed of sound well-seasoned timber; is stored on trestles in a dry cool shed in summer, and is painted every third year; then this punt should last fully twenty seasons of fowling.

LETTER XLV

THE FITTINGS OF A GUNNING-PUNT (EXCLUSIVE OF THE STANCHION-GUN AND ITS BELONGINGS)

MOVABLE SHUTTERS IN WASH-BOARDS—ROWING SPURS—SCULLING SPUR—MAST AND SAIL—SEAT-OARS POLES PADDLES—ANCHOR, AND BAILER

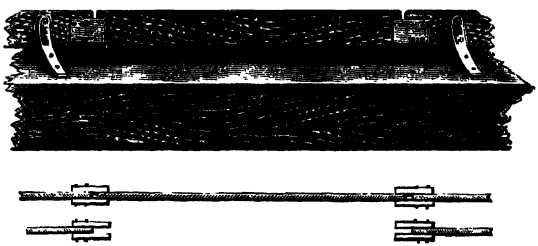


FIG. 57. HOW TO FIT A MOVABLE SHUTTER IN THE WASH-BOARD OF A GUNNING-PUNT

In all the illustrations of *double-handed* gunning-punts you will observe the puntsman, if stalking fowl, is working his oar, paddle or pole, as the case may be, through an opening in the wash-boards at the after-end of the cockpit.

When not stalking birds, the puntsman closes this opening with the movable shutter that fits it, to prevent water from washing on board the punt.

Cut *two* openings—each 2 ft. 10 in. long—in the wash-boards on opposite sides of the punt; the after-ends of both openings two inches forward of the after-end of the cockpit (fig. 57).*

* If the openings are cut out with their after-ends *close* to the after-end of the cockpit, then the security of the parts of the wash-boards that are attached to the after-deck will be affected.

Two openings are required aft in a double-handed punt in order to allow the puntsman to work through the one or the other according to the wind.

Neatly cut out the openings with a fine saw, their lower edges level with the side-decks, so that the two pieces sawn off form shutters that fit *loosely* into their *original* positions if held there.

Nail four small, and slightly projecting, strips of hard wood, each 2 in. long and ¾ in. thick, to the wash-boards at their upright cut-away parts, to drop the ends of the shutters between and thus temporarily secure the latter (fig. 57).

Either shutter can then be quickly lifted out (or replaced) to give the necessary space for the puntsman to freely use his arm when he lies down to pole, paddle, or scull the punt up to birds.

Strengthen the wash-boards, where they are sawn down, with small ash knees (fig. 57).

If you wish to stalk fowl in a *single-handed* gunning-punt by means of a pair of *short paddles*, you will require two openings in the wash-boards, each 2 ft. long (fig. 89, facing p. 573). The openings to be fitted with movable shutters in the manner described in fig. 57, their forward ends level with the end of the stock of the big gun.

If you wish to stalk fowl in a *single-handed* gunning-punt by sculling with an *oar*, or by shoving with a long *pole* (figs. 90, 91, facing pp. 575, 577), you will need one opening, 3 ft. long, (with, of course, a movable shutter) at the after-end of the cockpit, in the starboard wash-board.

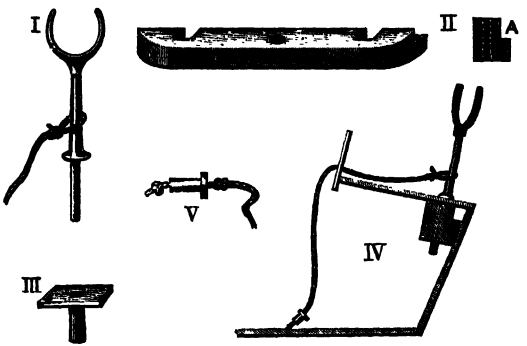


FIG. 58. ROWING SPURS AND HOW TO FIT THEM

I. Rowing-spur. [Thick leather to be sewn over every part, above flange]. Total length, 13 in. Opening for oar, 8 in. each way. Length below flange, 5½ in. Diameter of shank, ⅞ in.

II. Block to take spur (front and end view).

III. Brass socket for spur. Plate of socket, 3 in. long, 1¾ in. wide, ⅜ in. thick. Length of socket tube, below plate, 3½ in. Material of tube, ⅛ in. thick.

IV. Block fixed to sides and deck, and showing spur in position.

V. Brass stopper, 1½ in. long, to loosely fit hole in socket when spur is removed.

A couple of gun-metal rowing-spurs are indispensable, one on each side of the punt.* These should be arranged so that you can quickly put them in place with a view to shipping the oars, whether to cruise in search of sport, to pull off a lee-shore, or to follow wounded birds after firing the stanchion-gun.

Projecting *fixed* rowlocks are always greatly in the way, and if they come in rough contact with a boat, vessel, or pier-wall,

* Two on one side and one on the other will enable the puntsman and the gunner to each pull an oar in case of necessity.

the part of the deck they are fastened to is certain to be damaged, if not split open.

Cut two blocks of elm, respectively 16 in. long and 3½ in. square, and shape them as shown in II, fig. 58. The parts of the blocks that are cut out longitudinally (A II, fig. 58) fit over the strips nailed along the top edges of the sides. Let each block be cut to fit over two side-plank knees (II, fig. 58), the former cannot then move under pressure of the oars.

The blocks being well secured [at 4 ft. to 5 ft. aft from the gun-beam] by screws and riveted nails to the decks and side-planks, you may now bore the holes for the sockets (III, fig. 58) into which the shanks of the rowing spurs fit. Sink the tubes of the sockets in the holes and mortise the socket plates through, and flush with, the decks.

To each spur splice a piece of stout cord, pass the cord through a gimlet hole in the adjacent wash-board, and attach the small brass stopper (V, fig. 58) to its loose end.

If a spur is unshipped insert the *metal* (wood swells and then sticks fast) stopper in the socket-hole, to keep out water and mud. When the spurs are not in use lay them under the side-decks; the cords they are fastened to will save them from being mislaid, just, perhaps, when wanted in a hurry.

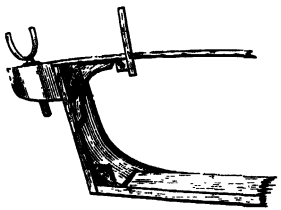


FIG. 59.—HOW TO FIT A SPUR FOR SCULLING A GUNNING-PUNT TO FOWL WITH AN OAR
(For surface view see fig. 74, p. 547)

To propel a gunning-punt up to fowl with an oar, as shown in sketch facing p. 571, you require a spur on its starboard side. The spur (its shank only 4 in. long) should fit into a small

block of elm that is fixed to the outside edge of the punt 1 ft. aft of the after-end of the cockpit (fig. 59). Unless the sculling-spur stands *clear* of the side of the punt you will be unable to work your oar without knocking it against the gunwale; and if the spur is not *well aft* you cannot scull the oar sufficiently astern of the punt to drive her straight ahead.

The piece of rounded (if square at the ends it will soon be knocked loose) elm that holds the spur may be 7 in. long, 3 in. wide, and 2½ in. deep.

Cut out a space in the fender-strip to neatly admit the block and thus allow it to fit close to the side-plank. Secure the block, with riveted nails, through the side-plank to the strip at the upper edge of the latter inside the punt.

The shank of the spur to work in a brass socket let into the block; the socket being the same shape and size as those used for the rowing-spurs (II, fig. 58).

The oar for sculling up to fowl should be *long* (10 ft.), *light*, and with a *narrow*, *flat* blade.

The longer the oar (in reason) the further aft, and consequently more effective, the propelling power. Again, the longer the oar the lower can the sculler keep his right hand when working it. Hence the less likely are the birds to see his movements. Easier too will he find it is to move the blade of a long oar to and fro (like the tail of a fish) under water.

SAILS FOR GUNNING-PUNTS

With a *steady* breeze and *fairly smooth* water a 'sprit-sail' may be used in a *large* double-banded punt (I, fig. 60). With this kind of sail you can sometimes run so fast up to fowl that you are right atop 'em before they realise their danger (sketch facing p. 579).

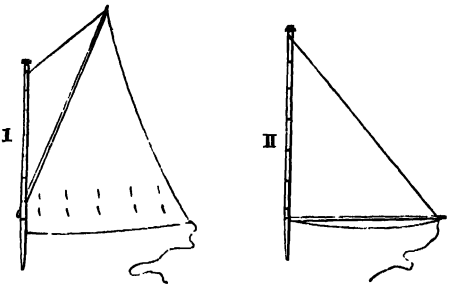


FIG. 60.—SAILS FOR GUNNING-PUNTS *

(I) Sprit-sail for a large double-handed gunning-punt

Mast, 8 ft. 4 in. long, $2\frac{1}{2}$ in. thick at 18 in. from foot, then tapering to $1\frac{1}{2}$ in. at truck, and at foot. Sprit, 8 ft. 7 in. long, $1\frac{3}{8}$ in. thick.
Hoist of sail (where bent to mast), 6 ft. 8 in.
Head of sail (from truck of mast to outer end of sprit), 4 ft.
Leech of sail (its outer edge from top end of sprit to main-sheet), 9 ft. 7 in.
Foot of sail (from mast to main-sheet), 7 ft.

(II) Leg-of-mutton sail for a double-handed gunning-punt

Mast, 8 ft. 2 in. long (same substance as given above). Boom, 6 ft. long.
Hoist of sail (where bent to mast), 6 ft. 6 in.
Foot of sail, along boom, 5 ft. 10 in.

Leg-of-mutton sail for a single-handed gunning-punt

Mast, 7 ft. 8 in. long. Boom, 5 ft. 6 in. long.
Hoist of sail (where bent to mast), 6 ft.
Foot of sail, along boom, 5ft. 4 in.

* Spars fir. (The mast to have a small round truck; if sharp at the top it will damage knees and timbers when shoved away under fore-deck.)

Sails—strong tanned linen (canvas or duck is too stiff and heavy).

For general service aboard a gunning-punt in *all* winds, blow high or low, whether you are cruising, sailing up to birds, or making a passage, I find the leg-of-mutton is, however, the handiest and safest sail (II, fig. 60).

This sail and its mast can be placed in position or unshipped in a moment, often with one hand. In a squall, all you need do is to raise the boom against the mast, twist the loose flaps of the sail a few times round the two spars, hitch them together with the sheet, and there you are under bare poles in three or four seconds.

In a sudden puff of wind a 'sprit-sail' is not nearly so easy to take in as a 'leg-of-mutton.'

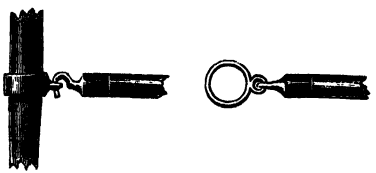


FIG. 61.—BOOM ATTACHED TO MAST

To attach, and hold, the boom of a leg-of-mutton sail to the mast, no goose-neck or other shackle is so simple as a strong hook and eye (fig 61).

FIG. 62.—MAST-RING BOLTED TO GUN-BEAM

The mast for either kind of sail to be round, and kept upright by being passed through a stout ring bolted to the gun-beam near the left-hand wash-board (figs. 62 and 64).

FIG. 63. BLOCK FOR FOOT OF MAST (Surface and side view)

The foot of the mast to be stepped, 2 in. deep, into a small block of oak 16 in. long, 3 in. wide, 2 in. thick. Fix this block lengthways with the floor of the punt, each of its ends sunk over a floor timber and knee (fig. 63).

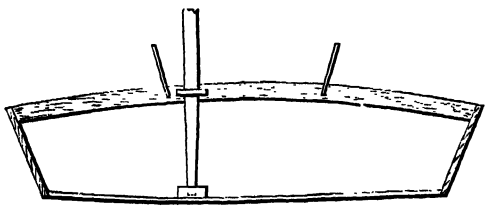


FIG. 64.—MAST IN POSITION

Bore with a gimlet through the block across the bottom of the mast hole (A, fig. 63) so as to make a passage for water to run out of the latter; it cannot then be blocked with ice in a frost. Place a circular piece of sheet-copper at the bottom of the hole to prevent the mast injuring the floor of the punt.

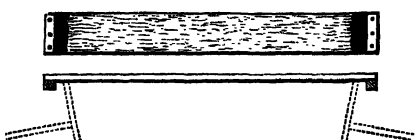


FIG. 65.—SEAT FOR A GUNNING-PUNT
(Surface and side view)

The positions of squatting or kneeling on the floor of a gunning-punt whilst you are waiting for the tide, or cruising about for the chance of sport, are often very tiring to the limbs,

A plank, 6 in. wide, to lay across the top of the wash-boards, (with ¾ in. square strips at its ends to prevent its slipping) you will find a great convenience, more especially in a double-handed punt (fig. 65). You can sit on this plank and pole or paddle the punt forward, or assist to do so, with your face to the stem, and instantly stow your seat away under the deck if you see any likelihood of a shot at fowl.

N.B.—The plank will be too elevated for *rowing* from; the ammunition-box should be utilised as a seat for *that* purpose.

FIG. 66. HANDLE-END OF AN OAR FOR A GUNNING-PUNT

Always carry *three* short stiff oars (7 ft. long) for pulling with (one may break). Their blades narrow and flat. If spoon-shaped, they cannot be used (as they will often have to be) as *poles* to push the punt off mud or sand. From your *low* position in a gunning-punt, the oars are, all along, very close to the surface of the water as you row, hence their blades, if too wide, will continually splash into any little wave there may happen to be.

Fix broad leathern collars round the oars to prevent the latter slipping through the spurs. You can then leave go of the oars to snatch up your shoulder-gun to kill a wounded bird, or one flying past (fig. 66).

POLES FOR USE IN GUNNING-PUNTS

The poles with blades, as shown opposite, are *far superior* in every way to the old-fashioned round ones. With the former you can steer, or sharply turn, your punt whilst actually sending her forward, by merely pressing the blade of the pole a little to the right or left. (With a round pole it is not possible to steer nearly so well, particularly in a side wind.) The handle of the pole being oval to the grasp, you can easily keep the blade in its proper position under water, i.e. straight up and down.

The knob at its handle end will prevent the pole slipping through cold fingers and going overboard, possibly at a time when you are stealing nicely up to a number of fowl.

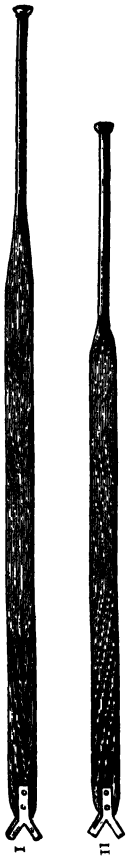


FIG. 67.—PUNT-POLES (ash)

The long pole for shoving a gunning-punt over shallows, when stalking fowl, is shown in fig. 67 (I).

Total length .	8 ft.
Length of handle .	2 ft. 6 in.
Length of blade .	5 ft. 6 in.
Width of blade .	3 in.
Substance of blade .	⅝ in. at centre sloping to ¼ in. at edges.
Width of handle .	1½ in.
Thickness of handle	1 in.

The gun-metal or brass (never iron, salt water soon eats it away) prong to be sufficiently heavy to just sink the blade of the pole below the water when you hold its other end lightly in your hand.

A perfectly balanced pole should float nearly upright, with its handle-end projecting a couple of feet or so above the surface.

The shorter pole (fig. 67, II) is for use in shallow water, or in a single-handed punt; its total length 6 ft. 6 in., its blade 4 ft. 6 in.

(See also sketch of punt-pole, with expanding head, for use when the ooze is very soft, p. 492.)

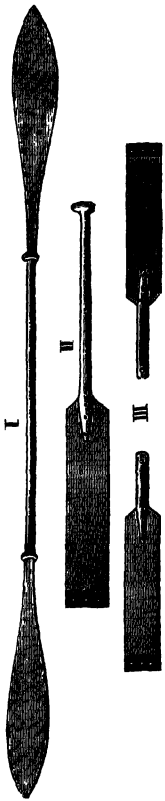


FIG. 68.—PADDLES FOR GUNNING-PUNTS

PADDLES FOR GUNNING-PUNTS

I. Long double-bladed *cruising* paddle for use in a single-handed gunning-punt.

Total length . .	8 ft.
Length of each blade . . .	1 ft. 8 in.
Blades at widest .	5 in.
Substance of blades	½ in. at centre, ¼ in. at edges.
Diameter of handle (between blades) .	1⅜ in.

The leathern collars prevent water running down to the hand, and then up the sleeve.

II. Paddle for *stalking* fowl with (in deep water) in a double-handed punt (illustration facing p. 569), and for general service aboard, whether cruising or following wounded birds.

Total length . .	4 ft. 9 in.
Length of blade .	2 ft. 2 in.
Width of blade .	5 in.
Substance of blade .	⅝ in. at centre to ¼ in. at edges.
Diameter of handle	1½ in.

III. Short paddles (two) for *stalking* fowl with in a single-handed punt (illustration facing p. 578).

Total length	2 ft. 2 in.
Length of handle	6 in.
Width of blade	$3\frac{3}{4}$ in.
Substance of blade	$\frac{1}{2}$ in. at centre to $\frac{1}{4}$ in. at edges.
Diameter of handle	$1\frac{3}{8}$ in.

The best material for paddles is straight-grained *ash*. The paddles (II and III) to be covered at their ends with *thick* sheet copper, or they soon wear down at the points. The copper to be as wide as the paddle, and to be put on in *one*, 4 in. long, strip. Bend the copper over the end of the paddle and secure it by short copper nails driven through wood and copper, and then firmly riveted over roves (fig. 68).

FIG. 68. COPPER SHACKLE IN STERN OF PUNT FOR ANCHOR-CHAIN

An anchor and chain are indispensable to all gunning-punts.

For a double-handed punt the anchor may be: weight $6\frac{1}{2}$ lbs.

Across the flukes	1 ft. 2 in.
Length along shank	1 ft. 9 in.
Length of movable stock	1 ft. 8 in.

For a single-handed punt the anchor may be: weight, $4\frac{1}{2}$ lbs.

Across the flukes	1 ft.
Length along shank	1 ft. $7\frac{1}{2}$ in.
Length of movable stock	1 ft. 7 in.

You will require 20 to 30 ft. of light galvanised chain, the links 1¼ in. long, ¾ in. wide, and ⅛ in. thick.

Chain is eventually cheaper, and is *much more reliable*, than rope, as it does not cut, rot, or fray, and will last a lifetime. It is also a deal more convenient aboard a gunning-punt, as it takes up a quarter the space required by rope, and from lying close and snug will not entangle with feet, oars, or poles.

The chain to have a shackle fitted to *each* end.

Place one shackle in the hole at the stern of the punt (fig. 69) and the other, a smaller one, in the ring of the anchor. Rivet the ends of the little cross-pins of *both* shackles, so that neither chain nor anchor can be *removed* from the punt without the assistance of a file, or of a hammer and cold chisel. The anchor will then, at any moment, be *ready* in case of *emergency*.

The chain can be led inboard, over the after wash-boards, and stowed away with the anchor below the after-deck.

If there is a chance of the anchor being required *at short notice*, ship its stock and lay it and the bight of the chain between the wash-boards on the after-deck.

N.B.— Select an anchor of ordinary shape and avoid a grapnell; the latter has not nearly the grip of an anchor of its weight.

When afloat in a gunning-punt you should be able to throw your anchor overboard in a second, and thus secure the punt from drifting away when, perhaps, you hurriedly leave her to chase wounded birds that have fallen ashore to a shot from the stanchion-gun.

You will also find an anchor is necessary for many other purposes, such as to moor your punt by day or night; to hold her while you clean her out; or to keep her steady (if you use a muzzle-loader) whilst charging the big gun.

An anchor is, besides, often a great *safeguard* against accidents. If, for instance, you find you are being taken by a strong current towards rough water, or you run the chance of being blown on the stones of a lee-shore, you can pitch out the anchor and thus avoid being swamped or wrecked.

I should have lost my life ten times over had I not *always* my anchor ready to hand in my gunning-punt.

I call to mind a narrow channel down which the 'ebb' at spring-tides rushes like a mill-race into the ocean, this outlet being the only one for draining an estuary of several square miles in extent. During an onshore gale the Ducks, Wigeon, and Teal pack in hundreds on a small spit of sand at the entrance of the channel in question, where they sit within a score yards of a steep surf that would almost capsize a lifeboat, and in which a gunning-punt would not survive a moment.

Yet I have several times successfully 'stormed' this 'fastness' by steering, as I was swept along, close to the edge of the channel, till in easy range of the birds. I then fired the stanchion-gun, hove out the anchor well-nigh at the same instant, and afterwards landed to pick up at leisure the result of the shot.

On these occasions no paddle, oar, or pole could possibly have checked the impetus of the punt driving seaward at the rate of quite ten miles an hour, or save her and crew from being sped to certain destruction in the roaring breakers about eighty yards ahead.

However, the birds had to be bagged *somehow*, and I succeeded in bagging them and hope to do so again, for the venture is an exciting one and the reward adequate to the risk.

FIG. 70. LEATHERN BAILER FOR A GUNNING-PUNT
(Length, without handle, 7½ in.)

You will have to carry a mop on board to clean both the inside and outside of your punt, to dry its floor, and to rub the mud off your long boots with after a tramp in the ooze. (A sponge decays very quickly at sea, and numbs the fingers in frost.)

A mop will not, however, bail out water quick enough if you ship a good deal, as often happens in a breeze. For this purpose a bailer as shown above is most suitable. The oval block of elm at its handle-end can be 5 in. long, 3 in. wide, and 1½ in. thick.

Round this wooden base get a saddler to screw one side of a piece of very thick leather 7½ in. in width, the edges of the leather being crossed, ½ in., along the *top* of the bailer and joined with small copper nails, their points riveted over roves.

Add a knob, 2 in. long, for a handle, and you have a really serviceable bailer that will last many years (fig. 70). It will take a large amount of water at a time, is noiseless in use, and, from the softness of its material, it can be scooped close to *any* part of the floor, and will not scrape off paint.

LETTER XLVI

HOW TO ARRANGE THE STANCHION-GUN AND ITS BELONGINGS IN A GUNNING-PUNT

GUN-CRUTCH—BREECHING-ROPE—ELEVATING-REST—SHOULDER-GUN—AMMUNITION-BOX—CARTRIDGE-CASE—STRETCHER FOR RAISING MUZZLE SHUTTER FOR CLOSING FORE-ENDS OF WASH-BOARDS.

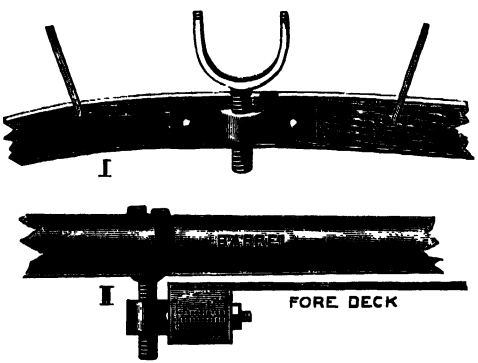


FIG. 71. CRUTCH FOR STANCHION-GUN SHOWN FIXED TO GUN-BEAM (Front view, I—Side view, II)

The punt and its fittings being completed, we have now to fit her gun. The barrel of the stanchion-gun should rest (at from 2 ft. 8 in. to 3 ft. 4 in. from its stock-end) in a crutch attached to the centre of the face of the gun-beam (fig. 71).

The crutch screws into its support so that it cannot shift, or work loose, from the heavy pressure of the gun.

By unshipping the gun and revolving the crutch a few times you can raise the barrel if it is too low in the punt.

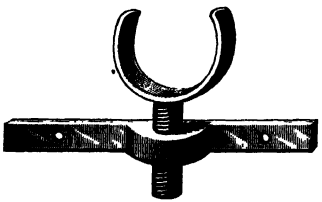


FIG. 72. CRUTCH AND ITS SUPPORT (both of gun-metal)

The support (excepting the projection which holds the crutch) to be mortised in flush with the gun-beam, and firmly bolted in position (fig. 71).

Length of support for crutch	7 in.
Depth " " "	1½ in.
Substance of ends	⅜ in.
Diameter of semi-circular projection in which the crutch screws	2½ in.
Diameter of hole for crutch	1¼ in.

Length of shank of crutch	4 in.
Diameter of shank " . . .	1$\frac{3}{16}$ in.
Width of each arm of crutch	1¼ in.
Thickness of arms "	⅜ in.

The spur of the crutch, in which the gun rests, to be sewn over with thick leather and to then take the barrel easily, with about ¼ in. to spare all round.

Be sure that the crutch can be twisted down in its support sufficiently low to allow the under-side of the barrel to come within ¼ in. of the surface of the deck-plank that is screwed over the gun-beam (fig. 71).

If the crutch is well clear of the front of the gun-beam (II, fig. 71), there will be no difficulty, and there will also be room for it to turn with the gun when you swing the latter sideways for a shot to the right or left.

NOTE.—It will be seen the gun-beam bears all the weight of the big gun; this it will *easily* do if properly fixed in the punt, for the gun-beam is an arch, and represents the strongest part of the deck.

The usual custom in a gunning-punt is to lay the barrel of the stanchion-gun in a plain crutch that has a long shank, the foot of which rests in a block on the floor of the punt.

A crutch of this description is, however, very inconvenient, as its shank prevents any articles you wish to keep dry, or to stow out of the way, being readily pushed under the fore-deck.

A short crutch secured to the gun-beam (fig. 71) bestows *much* more space aboard, for (as it has no long shank to impede) it enables you to shove well forward where they are easy of access, all movables such as oars, paddles, poles, mast, oilskins and ammunition-box.

The latter arrangement will thus give you an unencumbered floor from gun-beam to after-deck beam, and hence add greatly to your comfort and freedom of movement, whether in working the punt or when lying down to stalk fowl.

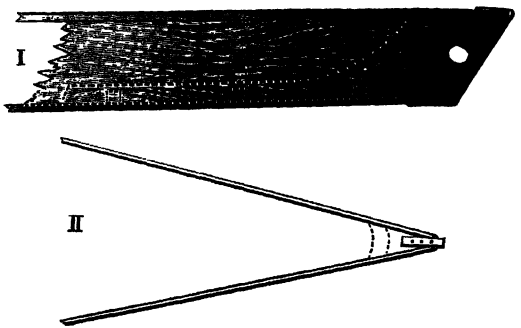


FIG. 73. HOLE IN STEM OF GUNNING-PUNT THROUGH WHICH THE BREECHING-ROPE OF THE GUN IS PASSED (Surface and side view)

Cut a hole, from side to side, through the stem of your punt, and which will *easily* take the breeching-rope you are about to fit to the gun.

The hole should be oval in outline and slightly inclined upwards (I, fig. 73). Slope off, with a gouge, the edges of the hole that are farthest from the stem so as to allow the rope to start fairly direct, from its turn, for the trunnions of the gun (see dotted lines, II, fig. 73).

If the edges of the hole, where in contact with the inside bend of the rope, are sharp and square, the rope will not lie close to the sides of the stem, and it will also be very liable to fray or cut at these parts.

FIG. 74.—BREECHING-ROPE FOR STANCHION-GUN FITTED TO GUNNING-PUNT
(The gun is here removed to show the rope more plainly; for gun fitted see p. 558)

BREECHING-ROPE

Splice a neat loop at one end of the rope. (A sail-maker or rigger will do this.)

Rest the stanchion-gun in its crutch at the gun-beam so that it overbalances 8 lbs. at the muzzle.

To acquire this balance, hang an 8 lb. weight to the stock of the gun, and then shift the barrel in the crutch till the gun just balances therein with the weight still attached to the stock.

The correct over-balance is 6 lbs., which will be attained when the gun has been fired a few times and the rope has been, as a result, slightly stretched.*

Now place, *without* altering the position of the gun, the spliced loop over the left-hand trunnion. Run the loose end of the rope through the hole in the stem of the punt, and lead it up to, and bend it round, the right-hand trunnion. Make this second loop secure with two or three tight lashings of strong tarred cord (figs. 74 and 75).

Both loops to fit *easily* over the trunnions to enable the gun to be cast off in a few seconds in case of necessity.

* The distance from the balancing point, at the crutch, to the trunnions being about 10 in. (*vide* p. 463).

With a small fastening of cord connect the rope above the stem (fig. 74, and fig. 82, p. 558).

This connection will hold the turn of the breeching snug to the stem, will force the rope to lie evenly along the fore-deck, and its looped ends, that fit over the trunnions, will be kept at the same length.

Never cover with leather, canvas, or wrapping, the breeching-rope of a stanchion-gun. All of the rope should be open to *frequent* inspection in order that you may *at once* detect any possible cuts or flaws.

Your *life* depends upon a *sound* breeching-rope. Use a rope for three years, then pitch it on one side, and expend a few shillings on a new one. A breeching-rope *might* last six years, but 'tis better to discard it *before* there is the *least chance* of its *giving way*.

In the summer remove the rope from the punt and hang it, coiled up, in a *cool* shed.

Select, as near as you can, a breeching-rope for your stanchion-gun in accordance with the table given below. The rope should be tarred *bolt-rope*, i.e., *sail-edge* rope, as it is the strongest and most pliable.

Shot-charge of Gun	Diameter of Rope	Approximate Circumference of Rope
2 lbs.	1⅞ in.	5½ in.
1¾ lbs.	1⅝ in.	5¼ in.
1½ lbs.	1½ in.	4¾ in.
1¼ lbs.	1⅜ in.	4½ in.
1 lb.	1¼ in.	4 in.
¾ lb.	1⅛ in.	3½ in.

A considerably lighter rope in relation to the charge of shot would, in each case, be *safe*, but it would stretch too much under the recoil, and, from its elasticity, cause the gun to 'jump' and shoot inaccurately.

Note.—Before firing a shot from the big gun *always* glance at the loops of the breeching-rope to make sure they are *absolutely secure*, i.e., each loop encircling the neck of its own

trunnion. A small strap buckled round the gun and breeching near the trunnions will hold the loops firmly in place.

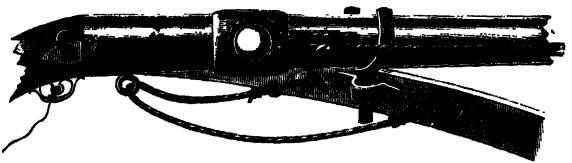


FIG. 75. SAFETY ROPE ATTACHED TO STANCHION-GUN

I have never known the breeching-ropes of my stanchion-guns to break, for I have been careful to renew them long before there was *any likelihood* of an accident.

There is, however, *always* a chance, remote though it be, of the best of ropes giving way. For this reason 'tis well to be on the *safe side* and to fix an extra fastening to your gun (fig. 75).

This safety rope may be 1¼ in. in diameter. Pass the rope through the stout eye-bolt that is screwed beneath, and into, the barrel of the gun (fig. 75), and splice a strong *wrought*-iron hook on each of its ends. The hooks to drop into copper eye-bolts bolted to the gun-beam on either side of the gun (fig. 75).

The rope to hang *loosely* so that it does not share the recoil of the gun with the breeching-rope, yet at once comes into play *if* the former were to part (fig. 75).

The latter event, with *ordinary* care, is well-nigh impossible; still, a mishap of the kind *might occur*! When it *does* happen [and you have re-arranged, as best you can, your battered features, mopped the blood from your face, and, if your eyes are *not* closed up, picked off the floor of the punt those of your teeth that were not knocked down your throat or overboard] you will, perhaps, be ready to admit, when too late, that a safety fastening to your stanchion-gun would have been an advantage.

FIG. 76.—MOVABLE REST FOR ADJUSTING THE ELEVATION OF A STANCHION-GUN IN A GUNNING-PUNT

ELEVATING REST

The head of the rest consists of two little blocks of oak, each 2 in. square, with an ash cross-piece screwed over them, 14 in. long, ¾ in. thick, and 2 in. wide.

The round ash handle about 6 ft. long and ¾ in. in diameter (fig. 76).

[The breeching-rope to lie *between* the uprights of the rest. These uprights will have to be sloped on their under-surfaces to match the round of the fore-deck, or they will not stand firm.]

NOTE. When the head of the rest (the punt being afloat) props up the gun so that it nicely covers birds swimming at 70 yards from you, the handle-end of the rest should, for future guidance, especially at night, be level with the point of the gun-stock.

N.B.—Never use a rest in the form of a crutch, or one that has *any* projections that hinder you from freely swinging the barrel of the gun to the right or left.

Above all, avoid a fixed rest, for such only allows the gun to be laid at *one* elevation in the punt.

An elevating rest is, in *my* experience, indispensable to *all* gunning-punts. By means of a rest you can adjust the height of your gun in a moment, even as you are about to pull trigger.

Fully *half* the shots taken with stanchion-guns, at birds sitting, are fired *too low*, the bulk of the charge usually striking the water or ooze short of the mark.

With the rest shown in fig. 76 this cause of failure is most improbable, for you can approach birds with your gun laid to point (as it should do) just above their heads.

If the fowl you are stalking are restless and likely to fly, and the water is *smooth*, draw in the rest till the gun is directed a yard or two over them. Then, when the birds spring, you can fire instantly and cut 'em down 'twixt wind and water' (of all times the best). This feat you will thus be able to accomplish twice as quickly and with much more certainty than you could had you no rest, and hence were compelled to go through the motion of depressing the stock to raise the muzzle.*

In a single-handed gunning-punt it is *very* difficult to fire a stanchion-gun satisfactorily without a rest, for you will always require one hand (often two in a breeze) to steer the punt till the very second of pulling trigger.

With the aid of a rest you can, however, arrange the elevation of your gun *before* you come near the birds, so that its barrel is at a height you *know* to be correct for doing proper execution at ordinary distances.

The gun may, under these circumstances, be fired with one hand, and the punt kept straight for the birds with an oar, paddle, or pole in the other.

If you have to propel and steer a single-handed punt till you are within range of the birds, and are then obliged to devote *both* hands to the gun (as will happen if you do not carry a rest), you will rarely make a good shot. The time expended in adjusting the gun will be too long for a rapid yet deadly aim,

* Should you be afloat in roughish water you will then have to aim the gun for a flying shot (by depressing its stock by hand) in the usual way, for if the punt is tossing about, and the gun is at a fixed elevation, the latter is as likely to point over or under the birds as towards them, at the moment they spring aloft.

and the punt will be apt to sheer off her course ere you can fire with full confidence of success.

At night it is seldom possible to align a stanchion-gun, for there is not then light to see how its sight really bears, whether high or low. With a movable rest you can lay your gun at an elevation that you are well aware will cause it to send its charge right among birds that are some 50 yards away.

When you see (or hear) fowl at night and consider they are in range, you need, therefore, merely pull trigger with the gun directed toward them.

I have fired, without a rest, many shots at great companies of Ducks and Geese, closely packed on water or ooze, but have invariably found, on these occasions, I did not bag *nearly* so many birds as I should have done had I not temporarily dispensed with this very necessary appendage to a gunning-punt.

In the drawing of a gunning-punt given at the end of this letter, and in the sketch facing p. 608, the elevating rest may be seen in position for use.

[By pushing the rest towards the stem of the punt, the muzzle of the gun is lowered. By pulling the rest towards you up the slope of the fore-deck, the muzzle is raised.]

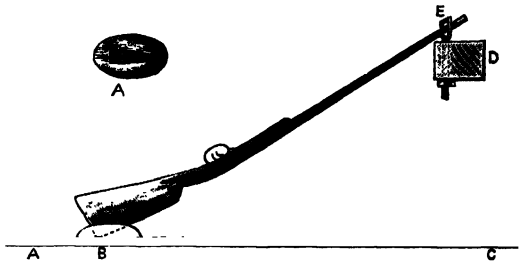


FIG. 77.—HOW TO SECURE THE SHOULDER-GUN IN A GUNNING-PUNT

A to C. Part of the floor of the punt.

B. Small oval block of elm riveted to the floor—7 in. long, 3½ in. wide, and 2½ in. high. The block to be *rounded* on its surface, or it will catch against loose articles aboard. The dotted lines indicate the opening cut in the block (see also surface view, A), that neatly fits the heel of the gun-stock and holds it firm.

D. Section of gun-beam.

E. The copper ring (2 in. across inside) that confines the muzzle of the gun. This ring to be covered with thick leather. It may also have, on its forward side, a little bag of canvas sewn to it (like one of the pockets of a kite's tail), into which the ends of the barrels can be pushed and which will thus prevent water splashing down their insides.

Fix the ring, E, near the edge of the gun-beam, close to the right-hand wash-board. The gun to be placed in a straight line with the floor of the punt.

The elm block will project 1 in. above the loose flooring-boards, one of which will require a hole in it to allow the rounded top of the block to come up. Bore a gimlet hole, level with the floor, through the block, to enable water to escape from the opening in which the stock of the shoulder-gun rests.

Your shoulder-gun you will constantly be obliged to keep *loaded* in the gunning-punt to enable you to kill, without any delay, your wounded birds after firing the stanchion-gun. You may even wish to have it ready to hand for a pop off at a chance Goose, Duck, or Plover flying past, if, that is, there is no likelihood of a shot with the big gun. In *either* case the shoulder-gun should be *very* safely secured with its barrel directed skyward, else, if it happen to discharge inadvertently, it may easily blow a hole through the floor or side of the punt and scuttle her.

The gun will not only have to be placed out of your way, but also where it escapes the rough company of oars, paddles, and poles. Yet it will require to rest in a part of the punt where you can snatch it up in a moment for a quick shot.

Fig. 77 shows how all this can best be achieved.

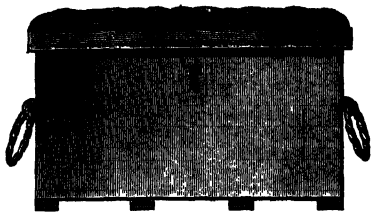


FIG. 78.—AMMUNITION BOX (WITH PADDED TOP) TO FORM A SEAT WHEN ROWING

(The, ½ in. deep, strips across its under-surface will save this part of the box from being frayed and soaked)

Depth inside	4 in.
Length „	14 in.
Width „	8 in.

Material- ¾ in. deal.

You will have no comfort in a gunning-punt unless your ammunition box will *easily* contain the cartridges, powder, and shot (or whatever articles are required) for loading the stanchion-gun.

The box will have to be *watertight*, and the only way to make it so is to line it throughout (including the lid) with thin sheet copper, the pieces soldered together at their angles.

The hinged lid to overlap the box 1 in., to prevent all risk of water entering at the joints. The top of the lid padded, 1 in. thick, with wool and covered with painted canvas, to save your breeks (and hinder parts) being rubbed through when rowing.

Finally, attach a strong handle to each end of the box, and a *good* brass lock that would almost hold a front-door.

Attach a bung of cork by a thong of leather to the key, then if the latter flips overboard it will not be lost.

Do not fix *partitions* in an ammunition box; these only lessen the space inside it without really adding to its convenience.

FIG. 78.—LEATHER CASE FOR SHOULDER-GUN AMMUNITION
(To hold 60 12-bore cartridges)

Depth inside, 5 in.

Opening at top beneath the lid, 5 in. long, 4½ in. wide.

Under surface, 5 in. long, 6 in. wide.

Material—thick leather *doubly* stitched at *all angles*.

The under surface to consist of *two* pieces of leather with a strip of sheet copper (cut to their shape) between them, so that the case may retain its form at this part and thus rest *upright* and *steady* on the floor of the punt.

The lid of the case to overlap the sides ¾ in., and to be secured to the back by three brass hinges fastened on with riveted copper nails (fig. 79).

As the lid is *hinged*, you can instantly raise it to take out a cartridge. If, however, the lid were solid with the case you would then have to force it back to lift it, and its stiffness would prevent the quick extraction of a cartridge.

A case of this description will last very many years, will keep your shoulder-gun ammunition perfectly dry (a most important matter), and yet always ready for use in a moment.

If you are about to chase a number of wounded birds on the ooze and are likely to fire many shots, you can carry the case with you, by its strap. When the case is slung to the shoulders it will be seen the lid opens *from* you, so that its contents are not only protected from rain or snow, but are also easy of access.

An ordinary cartridge-bag is most unsuitable to a gunning-punt, for if laid on its side any water slopping about will surely run into it; and as it cannot stand in an upright position on the floor, you are unable to quickly withdraw a cartridge from it when you require one in a hurry.

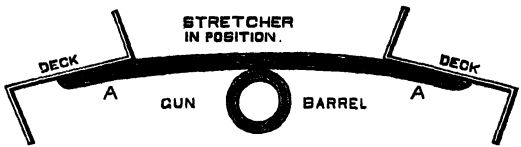


FIG. 80.—ASH STRETCHER (A A) FOR SECURING THE MUZZLE OF A STANCHION-GUN CLEAR OF ROUGH WATER

If your stanchion-gun is not well elevated at its muzzle and you happen to be pitching about in a bit of a wave, there is always the risk of a good deal of water splashing into, and running down, the barrel.

This may soak the charge and damage the inside of the gun.

At such times, unless attended to, a heavy gun will also swing violently to and fro, or knock roughly against the deck.

When making a passage, rowing after wounded birds, or when cruising under sail, the big gun should invariably be cocked up high at the muzzle and firmly fixed in this position from all chance of moving.

The best method is to lower the stock till it touches the floor of the punt, and to then wedge the curved stretcher (A A, fig. 80) across and above the barrel near where it joins the stock, the ends of the stretcher being forced tightly below the side-decks (fig. 80).

The stretcher (2 in. wide by $\frac{3}{4}$ in. thick) to be a foot longer than the cockpit is wide; this will allow it to rest under the side-decks for 6 in. at each of its ends when it is used for fixing down the stock in order to raise the muzzle of the gun (fig. 80).

Nail a small pad of leather at the centre of the under-side of the stretcher where it presses on the gun.

FIG. 81.—SHUTTER FOR CLOSING FORE-ENDS OF WASH-BOARDS

Material, elm; substance, 1½ in.; height at centre, 5 in.; height at ends, 4 in.

Place the shutter tightly up to, and across, the forward ends of the wash-boards so that it closes the opening between them in which the gun works. The ends of the wash-boards fit into the, ¾ in. deep, upright slots cut in the shutter (A A, fig. 81).

When the shutter is in position the breeching-rope passes under the openings B B, and the gun rests on the sloping semicircular hollow at C. To the inner side of each wash-board, near its end, attach a strong brass hook. These hooks respectively engage small eyes on the shutter at D D, and thus secure it from moving.

The stanchion-gun being raised clear of wave and spray we have next to construct a shutter that can, if necessary, be quickly utilised to close the aperture between the forward ends of the wash-boards (fig. 81). It is, of course, only requisite to fit on the shutter when you are afloat in rough water in order that it may stop any small waves, which run up the fore-deck, from entering the cockpit of the punt.

If, by ill-luck, you are caught out in a head sea which the shutter described cannot turn aside, depend on it nothing you could fix to your punt would save her from shipping water in large quantities.

In the event of *real* danger of *this* kind either drift sideways to the waves till you reach the shore or are rescued by a boat, or—as a last resort—lighten the punt by shoving the big gun overboard. Hitch the sheet of the sail to the gun, and let the gun, sail, and mast go to the bottom together. If you carry a long, light rope aboard, moor the gun to a paddle (see sketch facing p. 1). In either case you (*or* your executors) will then have a good chance of grappling up the gun on a future occasion.

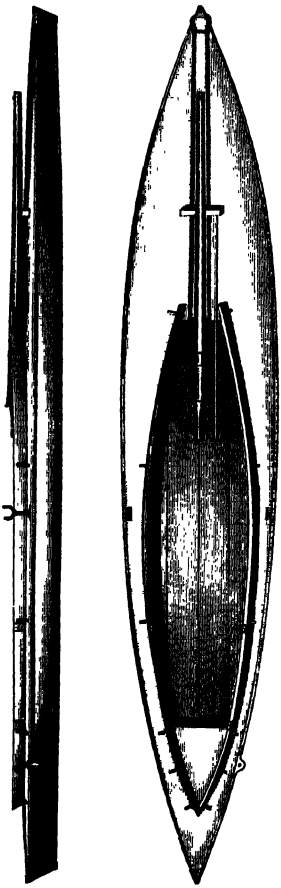


FIG. 82.—GUNNING-PUNT WITH STANCHION-GUN FITTED
¼in.=1ft. (No. II, p. 494)

LETTER XLVII

SLIDING RECOIL-BLOCK FOR A STANCHION-GUN THAT HAS A SWIVEL UNDER ITS BARREL

Rope-breeching looped to trunnions is, as before explained, indisputably the simplest method of absorbing the recoil of a stanchion-gun.

This system cannot, though, be applied to a barrel devoid of trunnions (as many are) and which is hinged to an iron pin.

A gun of this description is usually very faulty in the matter of recoil, for the pin it is secured to is intended to fit into a large wooden block firmly screwed to the floor of the punt.

Such a rigid manner of meeting the recoil of a heavy gun will surely strain the fastenings of an ordinary gunning-punt, and will also cause the barrel of the gun, when discharged, to throw up its muzzle and shoot astray.

There is no doubt that if a gun is fitted with Colonel Hawker's admirably effective spiral spring the jar of the recoil is considerably lessened, even when the block that holds the pin of the gun *is* fastened to the punt. A *fixed* block should, however, *never* be placed in a small or lightly-built gunning-punt. If a punt is of exceptional width and has a thick oak floor and sides, it might be practicable to do so; but it would be difficult to kill fowl with such a heavy and slow style of craft.

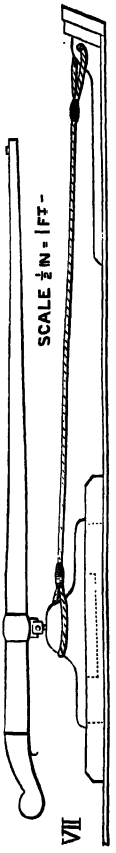
There are many varieties of sliding-blocks that run back with the gun when it is fired, and which, in this way, reduce the shock of the recoil; but *all* the contrivances of the kind I have seen are *immensely heavy* from the amount of *metal* about them, and *very inconvenient* by reason of their *great size*.

On the next page I give drawings (fig. 83) of a *sliding-block* I have had in *constant* work for a dozen winters in a punt built of only ⅜-in. planks, the gun used with the block weighing 200 lbs. and firing ½ lb. of powder and 2½ lbs. of shot.

This block has no metal belongings, cannot go out of order, is secure from accident, frees the punt from all risk of excessive recoil, and is as light and compact as possible.

The recoil of the gun pushes back the sliding-block a few inches, though with scarce force enough to crack an egg, and the subsequent contraction of the rope pulls it forward again, in readiness for the next shot.

FIG. 83.—SLIDING RECOIL-BLOCK FOR A STANCHION-GUN THAT IS ATTACHED TO A SWIVEL-PIN



DESCRIPTION OF SLIDING BLOCK (fig. 88)

I. Sliding-block in its frame, with gun in place.

II. Sliding-block separate from frame.

III. Socket-tube for swivel-pin of gun.

IV. End view of sliding-block.

V. Frame riveted, over timbers and knees, to floor of punt.

VI. Section across open part of frame.

VII. Fore-end of punt, with deck and sides removed, showing block and frame in position and breeching-rope attached to stem.

Note.—The projection (B. IV) that holds the sliding-block to the frame is a *separate* piece, and is screwed to the sliding-block from below the frame. The small holes between the openings for the timbers (I) allow water to run out of the hollow of the frame when the latter is fixed to the floor of the punt. The *small* hole through the centre of B (see also I and II) allows water or grit to escape from the brass socket tube, should such enter when the gun is unshipped.

The sliding-block is 2 ft. 9 in. long, overall, 7½ in. high (including the, 2½ in. deep, projection B) and 9 in. wide. The projection, B, is 16 in. long, 2¾ in. wide where fixed to block, and 4 in. across its under-surface. B should run freely to or fro in the opening of the frame (V and VI).

The frame is 4 ft. long, 9 in. wide, 8½ in. deep. Its central opening, in which B travels, 2 ft. 8 in. long. It will be seen the underneath projection (B) of the sliding-block would have to be forced (by the recoil of the gun) 8 in. either fore or aft before it could encounter the solid part of the frame.

FIG. 84.—HOW TO POLE A DOUBLE-HANDED GUNNING-PUNT OVER SHALLOW WATER UP TO WILDFOWL (Position 1)

LETTER XLVIII

THE VARIOUS METHODS OF STALKING WILD-FOWL IN DOUBLE-HANDED GUNNING-PUNTS

[As the sketches in this and the next letter are merely intended to illustrate the *positions* of the fowler when he is approaching wildfowl, in anticipation of a shot with his stanchion-gun, small details in the construction and fittings of the punts are omitted.]

FIG. 84.—HOW TO POLE A DOUBLE-HANDED GUNNING-PUNT OVER SHALLOW WATER UP TO WILDFOWL. (POSITION 1)

The puntsman lies full length, chiefly on his left side and forearm, his feet as far back under the after-deck as he can push them.

With his right arm stretched through the opening in the wash-board he shoves (and steers) the punt forward with the long pole shown in fig. 67, p. 587.

In the opposite sketch the puntsman is working his pole over the starboard quarter of the punt. If, to suit the wind, he found it more convenient to work over the port quarter, he would recline on his right side and arm and grasp the pole in his left hand, the other shutter in the wash-boards being then removed to allow him to extend his arm.

NOTE.—The puntsman (in a single-handed punt, the fowler) should be most careful to keep the hand and arm he is working with as *low* and as near the surface of the water as *possible*, lest his motions in propelling the punt be discerned by the birds he is stalking. He should also endeavour, when approaching fowl, to steer so that the side of the punt over which he is using his pole, paddle, or oar, is as much turned *from* the birds as is feasible, consistent, that is, with a fairly direct course. If he conceals, in this way, the actions of propulsion, he can often obtain a shot by stealing up to the *flank* of a shy company of Geese or Ducks, then suddenly swing round on their central ranks the moment he is in firing-range.

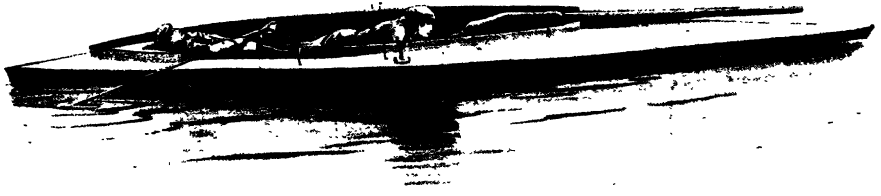


FIG. 85.— HOW TO POLE A DOUBLE-HANDED GUNNING-PUNT OVER SHALLOW WATER UP TO WILDFOWL (Position 2)
(N.B.—The puntsman is here shown on the flat of his back and propelling the punt with both hands. He should be reclining on his right side, and his left hand only should be working the pole)

FIG. 85.—HOW TO POLE A DOUBLE-HANDED GUNNING-PUNT OVER SHALLOW WATER UP TO WILDFOWL. (POSITION 2)

This is an alternative position to the last, and a very good one, especially in water of only a few inches in depth. It is a manner of approaching fowl in a double-handed gunning punt that is much practised on the estuaries of Holland. The puntsman in this case lies full length, face upwards, his head supported by the after-deck. He rests chiefly on his right side and arm, and uses the pole with his *left* hand, which he extends across his chest for the purpose.

If, to suit the wind, the puntsman reclines on the other side of the punt he then lies on his left shoulder and arm and employs his *right* hand in poling the punt.

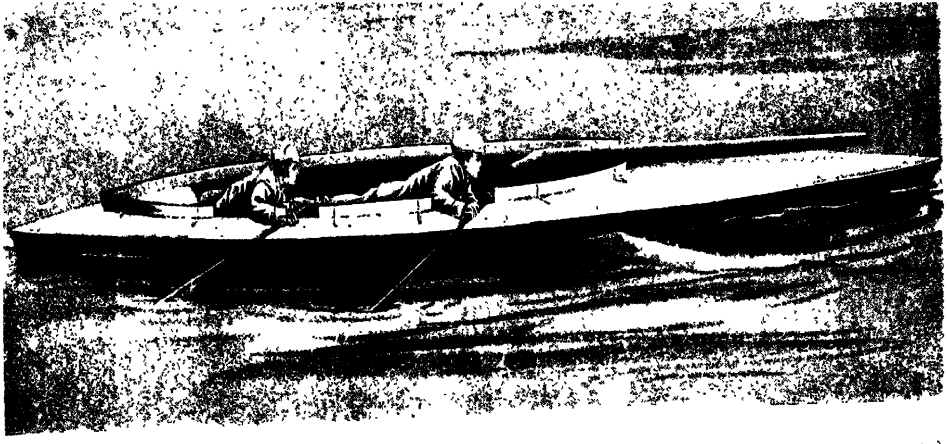


FIG. 86.—HOW TO POLE A LARGE DOUBLE-HANDED GUNNING-PUNT OVER SHALLOW WATER UP TO WILDFOWL (SHOWING THE SHOOTER ASSISTING)

FIG. 86.—HOW TO POLE A LARGE DOUBLE-HANDED GUNNING-PUNT OVER SHALLOW WATER UP TO WILDFOWL (SHOWING THE SHOOTER ASSISTING)

I have obtained *many* a shot at wildfowl by aiding my puntsman, *in an emergency*, in the manner shown on the opposite page.

A small opening, 18 in. long, in the wash-boards amidships, (closed by a movable shutter when not in use) and a short, well-weighted pole, 8 ft. in length, are all that you require.

The assistance you can, in this way, give the puntsman when the punt is in very shallow water · is scraping along the ground —is ashore on a mud- or sand-bank—or the wind is ahead and strong—is, at times, *invaluable*.

The extra help thus bestowed in propelling the punt will often enable you to stalk within range of birds you would not otherwise have approached sufficiently near to fire at.

FIG. 87.—HOW TO PADDLE A DOUBLE-HANDED GUNNING-PUNT OVER DEEP WATER UP TO WILDFOWL
(N.B.—The puntsman should have his right elbow resting on the side-deck, and his right hand nearer to the blade of the paddle than is here shown)

FIG. 87.- HOW TO PADDLE A DOUBLE-HANDED GUNNING-PUNT OVER DEEP WATER UP TO WILDFOWL

The puntsman lies on his back, his head resting on the fore-end of the after-deck. He paddles through one of the two openings in the wash-boards that are available for this purpose (one side of a punt will, according to the prevailing wind, always be the easier to direct her from).

The puntsman should work the blade of the paddle *entirely under water*, noiselessly feathering it forward every time before drawing it back.

He extends one hand well down the handle of the paddle near its blade, and his other hand he keeps above his chest.

To steer the punt he will find it necessary to press the blade of the paddle *inwards* from the right or left just as he finishes each stroke. If he encounters a shallow he can, without altering his position, shove the punt ahead by using the paddle as a short pole. (For paddle, see 11, fig. 68, p. 538.)

Under *favourable* conditions, this is a deadly method of stealing up to wildfowl. It is one that is much in vogue on large inland lakes, such as those of the West of Ireland.

Stalking fowl in this fashion is not, though, a successful means of approaching them on estuaries of the sea, for 'tis impossible to drive a double-handed gunning-punt against a running tide with a single paddle.

On fresh-water loughs—in slack tidal water—or when drifting with the 'ebb' or 'flood'—you can, however, usually stalk within range of fowl more *surely* with one large paddle (in the manner shown opposite) than you will in *any other way*.

The puntsman can steer the punt to an inch, and thus keep her stem *straight on the birds*, which is usually a very important matter in regard to coming near them.

He can also propel the punt with great steadiness and in perfect silence, and so stealthily that he may often draw within firing-distance of shy fowl which the motions of poling or sculling would have put on wing out of shot.

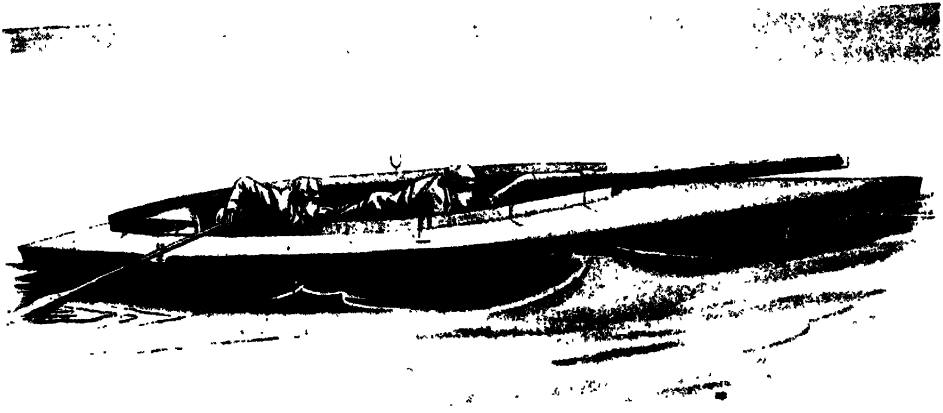


FIG. 88.—HOW TO SCULL, WITH AN OAR, A DOUBLE-HANDED GUNNING-PUNT OVER DEEP WATER UP TO WILDFOWL
(N.B.—The oar is here shortened in order to show its blade)

FIG. 88.—HOW TO SCULL, WITH AN OAR, A DOUBLE-HANDED GUNNING-PUNT OVER DEEP WATER UP TO WILDFOWL

The puntsman, his feet as far back under the after-deck as he can shove them, lies well over on his left side and sculls the oar, with his right hand, through the opening in the starboard wash-board.

The oar will require to be long (10 ft.) and with a narrow flat blade. The sculling spur to be fixed as described in fig. 59, p. 531, otherwise it is not possible to properly scull a gunning-punt up to wildfowl.

Sculling to birds with an oar is sometimes the *only* way of approaching them. If a puntsman is able to scull *quietly*, *quickly*, and *straight*, there is no better manner of sending a gunning-punt over deep water when stalking birds.

Not one man in a score can, however, scull satisfactorily, there being, as a rule, so much splashing, and straining with the oar, and wriggling of the punt, that the Ducks and Geese fly off ere they are near enough to fire at. The best sculler in a gunning-punt I ever saw is my friend the Hon. John Montagu, M.P.

NOTE.—The SHOOTER, in *all* double-handed punts, lies, when approaching fowl for a shot, flat as a flounder, close to the floor, his face a few inches behind the stock-end of the gun. He will be able, without raising his cap above their level, to now and then peep between the fore-ends of the wash-boards, to see how near he is to the birds. When *almost* within range he may *slowly* lift his head till he can just look along the barrel of the gun, at the same time placing his left hand on its stock (as a means of directing the muzzle) and taking the toggel of the trigger string in his right hand.

A few seconds before coming into firing-distance he should, *if necessary*, pull in or push out the handle of the elevating-rest, in order to lay the gun fair on the birds. This he can do in a moment and *without* leaving hold of the trigger string.

If the birds fly he can elevate the gun, as high as wished, by pressing down its stock with his left hand.

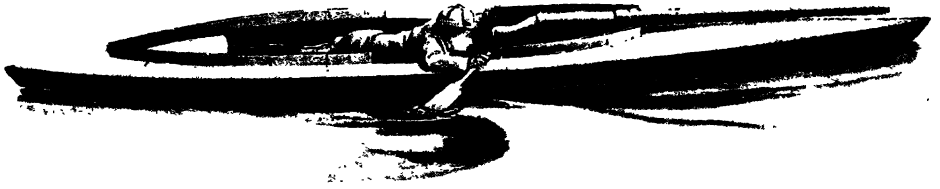


FIG. 89.—HOW TO PADDLE (OR IN SHALLOWS PUSH) A SINGLE-HANDED GUNNING-PUNT UP TO WILDFOWL

LETTER XLIX

THE VARIOUS METHODS OF STALKING WILD-FOWL IN SINGLE-HANDED GUNNING-PUNTS

FIG. 89.—HOW TO PADDLE (OR IN SHALLOWS PUSH) A SINGLE-HANDED GUNNING-PUNT UP TO WILDFOWL

The fowler lies face downwards, his chest supported by a cushion or a folded oilskin coat. With a small paddle in *each* hand he sends his punt forward in the manner shown opposite.

He extends his arms through the openings in the wash-boards, these openings at other times being closed by their movable shutters.

The paddles (III, fig. 68, p. 538) are worked to and fro beneath the water. If the fowler is in shallows he turns his paddles edge-ways, and, using them like little poles, in this way easily shoves his punt ahead.

When *within* shot of the birds he is stalking, the fowler drops the paddles [secured by cords from their handles to holes in the wash-boards], places his left hand on the stock of the gun to direct it, and pulls the trigger string with his right hand.

The fowler has, however, some difficulty at times in managing his stanchion-gun. As he is usually compelled to work his paddles till *actually in range of the birds*, he has often to be mighty quick in dropping them and in then firing the big gun.

He is, as a rule, forced to pull trigger *instantly* he leaves hold of the paddles, for the punt, especially in a side wind, will generally at once sheer off the birds when no longer steered by the fowler.

If the stanchion-gun is a little too high or a little too low he will seldom be able to alter its aim before the birds have detected him and flown away. For this reason the fowler should *previously* arrange his gun on the elevating-rest so that its muzzle nicely covers a mark at sixty to seventy yards' distance.

The end of the handle of the elevating rest will, as explained at p. 550, tell him when his gun is correctly placed for killing birds at a fair range.

This is the *usual* and by far the most *successful* mode of stalking fowl in a single-handed gunning-punt, particularly at night, when flying shots are never taken.

FIG. 90.—HOW TO SCULL, WITH AN OAR, A SINGLE-HANDED GUNNING-PUNT OVER DEEP WATER UP TO WILDFOWL

FIG. 90.—HOW TO SCULL, WITH AN OAR, A SINGLE-HANDED GUNNING-PUNT OVER DEEP WATER UP TO WILDFOWL

In this case the fowler sculls a long, light, narrow-bladed oar, through the opening in the wash-boards of his punt on its starboard side near the after-deck. His actions are similar to those of the puntsman who sculls a double-handed punt (fig. 88, p. 570), and the sculling-spur should also be fitted to his punt as shown in fig. 59, p. 531.

When within range of birds, the fowler, without drawing the oar inboard, fires the stanchion-gun [laid all ready at a proper elevation] with his unoccupied hand.

If a man is proficient in sculling, this is an excellent method of sending a large single-handed punt, and its correspondingly heavy gun, over deep water up to fowl; a punt, for instance, so wide of beam that the sportsman cannot, as described in fig. 89, reach across its deck to work hand-paddles.

FIG. 91.—HOW TO POLE A SINGLE-HANDED GUNNING-PUNT OVER SHALLOW WATER UP TO WILDFOWL

FIG. 91.—HOW TO POLE A SINGLE-HANDED GUNNING-PUNT OVER SHALLOW WATER UP TO WILDFOWL

This, again, is a successful manner of propelling a large single-handed gunning-punt over shallow water up to fowl, *if*, that is, the punt is so wide the fowler is unable to employ, as shown in fig. 89, hand-paddles.

The fowler uses his pole (through an opening in the wash-boards of his punt on its starboard side. See opposite sketch) in a similar way to the puntsman in the double-handed punt, fig. 84, p. 562.

When within range of the birds he is stalking, the fowler, without drawing the pole inboard, devotes his unoccupied hand to firing the stanchion-gun, which latter he will have previously arranged at a proper elevation.

LETTER L

SAILING TO WILDFOWL IN A GUNNING-PUNT

THIS is, now and again, a *most successful* manner of *outwitting* Ducks and Geese on the coast. It is, indeed, frequently the *only* way of killing fowl from a gunning-punt.

If the water is *rough** and the wind *strong*, the motions of propelling and steering a gunning-punt do *not* partake of that quiet, stealthy nature that leads to a shot with the stanchion-gun, and as your punt will dance and splash about in very brisk fashion (even with a following wind and wave) her progress will usually be slow and *conspicuous*, and her course indirect.

Under these conditions you will surely attract the attention of the birds you are stalking long before you are near enough for a shot from the stanchion-gun, and they will, as a result, generally take wing at a safe distance.

At such times I advise you to *sail*, for in stormy weather I have made many heavy shots at Geese and Ducks by sailing, when stalking them with pole or paddle was out of the question.

When sailing to fowl in a good breeze, your approach is so *swift*, *straight*, and *steady*, that you may often run right aboard 'em before they discover their danger.

If, in a lively sea, you are stalking birds with pole or paddle and they become *suspicious* and *stretch their necks*—at some two gun-shots—you can rarely cover the seventy to eighty yards of water that will bring you in range ere they fly away.

Should you, on the other hand, happen to be *sailing*, you will occasionally rush up so quickly that a shot may be obtained as the birds spring, though they have been all *alert* and on the point of doing so for several seconds. The few seconds, however, that intervene *between* the moment the birds *suspect* an enemy and the moment they *decide* to fly off may just permit a fast-

* Rough for a *small* and very *low* craft like a gunning-punt, though, perhaps, a mere ripple to a ship's boat.

ADRIFT ON THE OOZE

sailing punt to sweep up sixty or seventy yards *nearer* to them, a length that may possibly just take you nicely within firing-distance.

When sailing with a fair wind to fowl the punt drives smoothly along, she can be steered in a bee-line, and the gun, from first to last, may be kept level, and also true on the mark. The birds, whether on water or ooze, as they invariably rise head to wind—are, besides, certain to cross your bows and to thus afford a tolerably easy flying shot.

The puntsman (in a single-handed punt, the fowler), with his feet shoved under the after-deck, steers the punt with an oar over its leeward quarter. (See opposite sketch.)

Sailing down on a great company of Geese, Ducks, or Wigeon, in a strong, favouring wind, is an exciting experience in a gunning-punt.

The water surging close past you, the rapid motion, and the delightfully *fast* pace you race up to the birds—compared to when you are *slowly* struggling ahead with a pole or paddle—makes this style of sport with the stanchion-gun a *very* fascinating one.

(For a description of sail and mast see p. 533.)

NOTE.—Sailing to fowl is successful only in those harbours and estuaries where the birds are daily accustomed to see smacks and sailing-boats near their haunts.

If this is not the case your punt, when under sail, will appear to the Geese and Ducks as some strange monster, and they will rise on wing to avoid it long before you are within gun-range.

LETTER LI

ON THE SELECTION OF A SUITABLE LOCALITY FOR STANCHION-GUN SHOOTING

THOUGH a couple of thousand Brent Geese and Wigeon may daily be observed tossing on the waves of the sea, or resting at low-water on the central ooze of a tidal estuary, it does *not* follow you will kill a *score* of these birds in *a winter's shooting*. Your outfit may be perfect, your perseverance immense, yet, if the locality is an *unfavourable* one for *approaching* fowl in a gunning-punt (though the birds be in clouds wheeling in the air and in black masses on the water or mud-banks) all your endeavours will end in failure.

When a great concourse of wildfowl frequent only one part of an estuary, or some bay on the coast, this habit, in *my* experience, signifies the birds have assembled in such places *because* they find they are secure therein from disturbance.

A few *small* and *dispersed* companies of Geese, Ducks and Wigeon that you are able to obtain shots at *now* and *then* will afford far more diversion than the 'grand army' which once a week you *nearly* stalk within range of, once a month within a *very* long shot of, and once a year run close up to, and *then*, perhaps, have a misfire, or make a poor use of your opportunity by aiming too high or too low!

One of the *first* matters to consider under the title of this letter is *safety*. It robs stanchion-gunning of *all* its charm if you are continually wondering *how* you will contrive to reach home *if* the water becomes rough *or* an adverse wind should blow.

If you are compelled to pass over a broad extent of tide to

visit the resorts of the fowl, this will *never* be a *safe* undertaking in a gunning-punt, *unless* you are attended by a sailing boat.

If, too, when turning homewards, wide deep water is betwixt you and your quarters, or even the nearest land, you will have many a qualm about crossing it, though cross it you must, or drown, at times.

The fowl that tempted you into danger have, probably, flown away unscathed; night is closing in, and a sudden breeze is moaning up and increasing every moment. It is not, then, a pleasant prospect, this mile or two of breaking waves, showing angry and white-crested in the gloom of a dark evening, and a craft to negotiate them with that has but 6 or 8 in. of freeboard!

Perfect localities for stanchion-gunning are very scarce in our islands, still they *do* exist, particularly in Ireland.

A handy place for shooting from in England, Scotland, or Wales, is usually overdone with gunners, and the fowl so shy from incessant persecution that following them is, to the gentleman gunner, almost a waste of time and energy.

As the amateur shoots for amusement and not profit, he should choose a position for fowling from that will permit him to cruise *throughout the day*; he, at all events, then has his 'outing' and the *chance* of a shot.

If you are stationed where you dare not venture from land in certain winds or tides, you will idle many a long hour ashore. But if you are able to take a cruise at will, you may, anyhow, spend an enjoyable day afloat, though you return with an empty bag.

Select, therefore, an estuary with a well-sheltered main channel which you can voyage down in your punt for several miles on the ebb-tide till the time of low-water, and are *then* able to paddle along home again on the 'flood.'

You will, in this case, be cruising all day, and should birds be seen, the favouring tide will greatly aid you in stalking them.

If, on the other hand, you are resident near the *entrance* to an estuary or marine river, and the haunts of the fowl are higher up the tide, that is to say *above your quarters*, you will constantly be contending with an opposing current. You will either have to struggle up against the 'ebb' to seek the birds and then en-

counter the full force of 'flood' as you return home, or else you will have to go up on the 'flood' and, *if* you wait till after 'high water,' come back on the 'ebb.'

In the latter event you will chiefly be fowling in *deep open water*, instead of, as you should be, amid the shallows and ooze-banks exposed during the last half of the 'ebb' and the first half of the 'flood,' when shots at fowl are not only *most probable*, but good creeks and channels by which to come near them are generally available.

To be able to easily launch and land a gunning-punt is a *real* convenience, but is one not often connected with this sport.

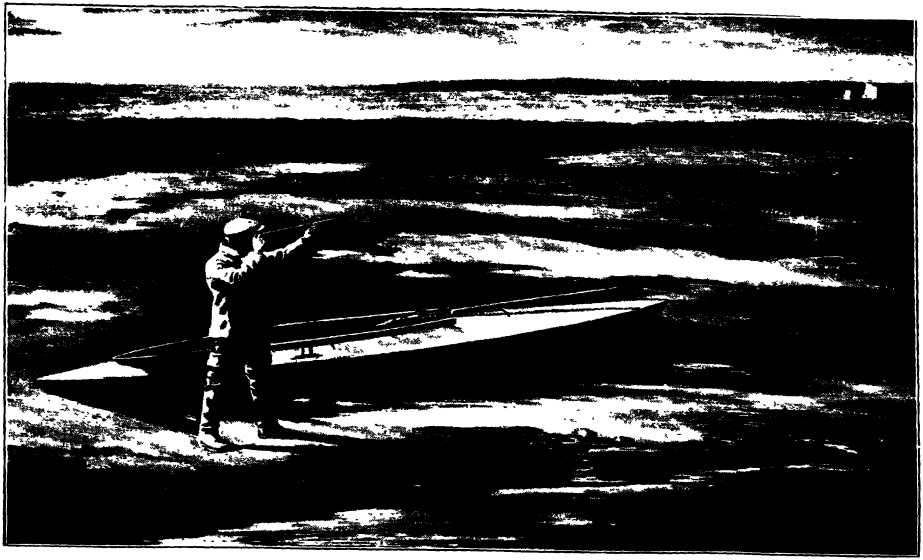
Nothing is more irksome or tiring than sliding and hauling a punt and its heavy gun up or down a long stretch of knee-deep rotten ooze every time you go afloat.

It is, I admit, seldom possible to discover a quiet nook where you may, in *all* weathers, anchor your punt and gun so that the former is ready at any period of the tide to step into for immediate use, but 'tis indeed a luxury can you do so.

The most unsuitable estuaries for gunning in are those which are not intersected by channels that hold water when the tide is low. On such estuaries as these the fowl can usually rest and feed at a half-mile or more from all risk of a gun, and will, as the flood' rises, often fly off to sea or to some other unsheltered water where it is out of the question endeavouring to stalk them. When the birds are sitting on a vast expanse of ooze, left dry by the ebb-tide, you may spy them through your *telescope*; but, unless there are channels leading to their retreat, you need not anticipate a shot with the *stanchion-gun*!

As the 'flood' washes over the flat mud of an estuary of this description, it will commonly float the birds off their legs and induce them to spring on wing ere *you* have sufficient water to allow you to shove your punt up within firing distance of them.

On estuaries that are not traversed by channels at low-water you have no concealment for stalking fowl, and you are very liable to be left 'high and dry' through trying, when the tide is ebbing fast, to come near Geese and Ducks you have seen alight.



STRANDED AT SUNSET, OR HIGH AND DRY ON THE OOZE WITH SIX HOURS TO WAIT FOR THE FLOWING TIDE

You may possibly push your punt within two gun-shots of the birds, run aground, and before you are able to pole her off to deeper water find you are stranded for half the day or night, miles from land or assistance (see opposite sketch).

The wind should influence the choice of a gunning-station.

For example, on our western coasts avoid settling with your stanchion-gun on those shores of an estuary that are exposed to breezes from the west.

On our eastern sea-board shun the portions of an estuary that are beat by winds from the east.

You will, as a result, have shelter for going afloat at times when the on-shore gales drive the fowl to your vicinity that they may escape the rough water of the adjacent coast.

These remarks anent finding harbour from the very winds that serve to send the birds to you are equally applicable to the upper reaches of tidal rivers. Even here you will invariably notice one shore is less subject to wind and wave than the other. The former is, of course, the one to establish your gunning-quarters on, for, being the less affected of the two by rough weather, it is sure to be preferred by the wildfowl of the district.

If the ooze-banks of an estuary are green with sea-grass (*Zostera marina*), wildfowl will be *somewhere* about. Should the tidal banks merely consist of *hard*, *clean* sand, or rock, you may as well expect companies of Ducks and Geese in Piccadilly as in such foodless surroundings! The only fowl you are, under these conditions, likely to shoot will be a few migratory Ducks and Teal in the autumn, or home-bred ones in the winter that are driven to the salt-water by severe frost inland.

'SHOW ME THE FOOD FOR THE BIRDS, AND THE BIRDS WILL SHOW THEMSELVES, I HAVE ALWAYS FOUND.'

For this reason, the first question to ask of local shooters, when you inspect an estuary with a view to recreation with the stanchion-gun, is, 'Where do the numbers of fowl you talk of *feed*?'

If there is *no food* to be seen in the form of weed covering the banks laid bare at low-water, and no *preserved* marshes in the neighbourhood containing Ducks and Teal, I advise you to search *elsewhere*, for the birds you seek (especially Brent and Wigeon, the stand-by of the stanchion-gunner) will *not* be present, though many worthless species, as Scaup-Ducks, Oyster-catchers, and Dunlin, may be plentiful.

ON THE LOOK-OUT FOR THE 'PEEP O' DAY SHOT,' OR MARKING BIRDS DOWN AGAINST THE RISING DAWN

LETTER LII

HOW TO MANŒUVRE AND KILL DUCKS AND WIGEON BY DAY WITH A GUNNING-PUNT AND STANCHION-GUN

PROVIDED the tide is suitable then the first hour of dawn, when you can barely distinguish a bird on the water at 100 yards, is worth *all* the rest of the day for the chance of a shot at Ducks and Wigeon with the stanchion-gun.

At this time the fowl are usually *tame* and *sleepy* through feeling *satiated* after their night's feed. They will, however, in *fine weather*, or when an estuary is much *disturbed* by gunners, often fly at sunrise to a bay on the coast, or to some other safe retreat for resting in till dark. Still, you *may* be able to give 'em a charge of shot ere they leave for their distant, or inaccessible, haunts.

The most propitious tide—for stalking wildfowl from a gunning-punt at daybreak is one that is washing over, but has not *quite* flooded, their feeding-grounds. The birds will be so loth to quit these spots (even though no longer gathering their favourite weed thereon *) that they will either crowd the small part of the ooze yet at their disposal to stand on, or in dense rank throng the shallow water round its edges—dabbling, laving, and pluming. Then is the moment for the stanchion-gun.

In on-shore gales, especially if combined with frost, the Ducks and Wigeon will not be inclined to visit the rough waves of the sea, or those of the broad tide-ways.

In stormy weather they naturally prefer, *if allowed*, to pass the day peacefully reposing on the central ooze of an estuary, or on the smooth slopes of its creeks and channels.

Here, again, is your opportunity; for, as the 'flood' creeps up the flats, the birds, flitting a yard or two at a time, and walking from it, will finally huddle, shoulder to shoulder, on the last stretch of sand or mud available. (See opposite sketch.)

* In ordinary weather Wigeon, Ducks, and Teal seldom feed after the morning light shows in the east.

This they do because they desire to avoid the cold waves and spray of the advancing tide, and to remain on land as long as possible before being *compelled* to ride the gale out afloat, as they will have to when the tidal banks are beneath the water.

The best hour for a shot at Ducks and Wigeon, positioned as here described, is when the tide is about half-flood at 4 o'clock in the evening.

The birds will then be anxious to rest in anticipation of busily searching for food throughout the night; and being generally *near* their food on these occasions, they are unwilling to leave its vicinity.

As the birds will be tossing about in deep water for several hours after dark ere the ooze-banks they find sustenance on are uncovered by the 'ebb,' this, also, no doubt, influences them to be quiet, and hence less on the alert in the late afternoon.*

As you can much more readily discern fowl in the early morning by steering for the glint of the dawn in the east, so at dusk you will see them considerably farther by facing the fading light in the west. In both cases *you* have the advantage of

* If the tide has been high during the night, and kept up by an on-shore wind for a longer period than usual, Wigeon will be so hungry the next evening that they will sometimes *swarm like bees* on the first small patch of their feeding-grounds that is uncovered by the 'ebb.' They may not collectively start gathering the weed thereon till dark, but their delight in seeing their food again, after a long interval, attracts them to its vicinity like flies to honey.

If, again, the water has been *very rough* at high tide in day-time, Wigeon and Ducks will often pack very thickly on any little island of smooth sand or mud *directly* it is bared by the 'ebb,' for they are so weary of being tossed about in the waves, they hail such a spot with joy as a means of resting and sleeping.

In both cases the birds will be *tame* and *unobservant* compared to other times, and will even allow you to stalk within fifty yards of them—*if you can do this on the ebb*—but *there* lies the *difficulty*.

You *may*, however, find a convenient little creek or channel that will allow you to paddle up within range of the birds, fire your shot, and retire ere you are *stranded* for the day or night. 'Tis usually a forlorn hope, but a splendid reward if you succeed, and I have made some of my *heaviest* shots by a cut in at 'em in this style. A rapid approach, not a moment lost in securing the cripples, and a hurried retreat to deep water, and the job is done—and well done, too.

WIGEON GATHERING ON A TIDAL BANK AT SEA JUST BEFORE IT IS COVERED BY THE 'FLOOD

being in the shade, while the *birds* you are stalking are easy to observe in the horizontal light in front of you that is reflected from below the horizon to the sky, and from the sky down to the water.

At *all* times endeavour to pole or paddle to birds with a background of land, ooze, or even dark clouds, *behind you*.

If you can stalk fowl from amid a few rocks, pieces of floating seaweed, or lumps of ice, such are also great aids to drawing in range of them, for you are liable to be confused in their eyes with your surroundings till the moment of pulling trigger.

If you are able to steal unnoticed up creeks and channels to Ducks and Wigeon, as they sit on the mud-flats, such precautions are unnecessary.*

Should the sun be *low*, and shining brightly *directly astern* of you, you may, now and again, run right up to fowl on the water, for the sparkling path of light you come along will (*if* you keep inside its narrow width) disguise your approach by dazzling the vision of the birds.† I have many times stalked *close* to great companies of Geese and Ducks, by utilising, in this way, the glare of the morning or evening sun, when I could *not* otherwise have worked my punt near enough to fire the stanchion-gun.

If fowl are collected on level ooze, with no channel or creek to assist you to come near them, it is unwise to try to struggle up within range, inch by inch, just as the slowly deepening flood-tide allows you, at intervals of, perhaps, several minutes, to shove the punt forward.

Your 'stalk' will, under these circumstances, be so *protracted*

* Two very important matters connected with killing Wildfowl by day from a gunning-punt are: (1) The selection of a suitable background from which to make the approach, (2) in choosing the moment for stalking them when the birds appear to be most settled.

† This is equally noticeable when Grouse or Partridges, flying at a low elevation, are driven to a shooter, if, that is, the latter has a brightly setting sun behind him. In such case the birds will usually fly direct to the gun, without swerving, the vivid light they are facing to a great extent obscuring their power of quickly perceiving an object in front of them.

and your motions of poling or paddling over the shallows so *energetic*, that the birds will be very apt to perceive you and take alarm.

If, however, you wait patiently till the flowing tide is *near* the birds, and you then run *quickly* and *quietly* up to them, in an ample depth of water, you have a deal more likelihood of securing a shot.

At all times I advise you to stalk a *small* lot of fowl *placed well together*, rather than a *large* number *dispersed* over a wide area.

A shot at twenty to thirty Ducks, Wigeon, or Geese, nicely packed on the edge of a creek or channel, or on the ooze, may result in a score birds being killed, while several hundred scattered about, and sitting a few yards one from another, may not give a half-dozen to the discharge of your gun, and should not be fired at or even disturbed.

What appears a dense gathering of wildfowl, when viewed from the low elevation of a gunning-punt, will often turn out to be, as you draw up to them, widely apart, though at a distance the farthest birds and the nearest appeared in the same line, and thus gave the idea of a close company.

The best chance of obtaining shots at Ducks and Wigeon by day is in cold stormy weather. The birds then seek, when the tide is out, the small sheltered channels and creeks of an estuary, and sit, to keep warm and escape the wind, wing to wing, their heads and necks, when they raise them, appearing crowded as sticks in a fagot.

If you are unable to go afloat in strong winds, through selecting an exposed situation for your fowling quarters, you will rarely accomplish a heavy shot with the stanchion-gun.

NOTE.—Previous to launching his gunning-punt, the young fowler should study, for some days, in each fresh locality he visits—(1) The peculiar habits of the birds in regard to their feeding and resting places; (2) The nature of the water and ooze they frequent.

NICELY IN SHOT OF THE GEESE, BUT FAST IN THE ICE, WITH A CHANCE OF BEING DRIFTED OUT TO SEA

LETTER LIII

HOW TO MANŒUVRE AND KILL BRENT GEESE WITH A GUNNING-PUNT AND STANCHION-GUN

To out-manœuvre BRENT GEESE is a *much* more difficult task than to kill Ducks and Wigeon. About once only in ten years have we weather sufficiently cold to tame these crafty and vexatious fowl—vexatious, because, numerous though they be, they are, one and all, so provokingly and constantly *watchful* and *cunning*, and so little subject to the elements, that the gunner often despairs of circumventing them.

With a month of frost - happily so severe as to occasionally cover with a sheet of ice the weed the Brent feed on—*and* a succession of on-shore gales, you *may* possibly come to terms with these circumspect fowl.

However Arctic the weather, *if* the water along the coast is calm, and the wind light, whether on or off shore, the Brent are usually secure from the gun, for they will persistently adhere to the sea and main tide-ways, and will exist on the weed that drifts with the 'ebb' out of some adjacent estuary. They will not then visit the ooze-banks for food, or require to take refuge in the creeks and channels. With a hard off-shore wind, the weed which the Brent feed on in calm weather at sea either drifts too far from shore for them to follow it, or is so tossed about in the waves that they cannot pick it off the water. In this case the birds are forced to search for maintenance *inside* the estuaries, as they also are when an on-shore gale heaps the floating weed up the beach.

To teach these rascals proper manners we need six weeks of frost and whirling storms of snow such as is suggested by the pictures of Napoleon's retreat from Moscow.

The warm winters we generally suffer from (the glorious season 1894–5 excepted), with primroses sticking up their sickly looking heads in January, and great ugly butterflies jigging up

and down in the sunshine, are inimical to sport with Brent Geese.

If you cannot kill Brent with the stanchion-gun by stalking them (in mild, quiet weather they will seldom allow you within 200 yards in the open) you will have to employ strategy.

There are three methods by which I have done this successfully.

(1.) Lay up near their feeding-grounds in a small deep creek that intersects the ooze and which is just wide enough to hold your gunning-punt. A fresh breeze from the right to the left, or the reverse, is indispensable. As the companies of Brent fly from one portion of their feeding-grounds to another, they will, as they head the wind, sometimes pass at a low elevation, right across your front, in easy range, when, if well concealed, they will not see you till opposite your gun.

(2.) Lay up (with a little spit of mud to hide you) near the entrance of a narrow channel in the ooze, with your punt and gun directed seaward (or else towards the water the geese are resting on) and *straight down wind*. The chief feeding-grounds of the geese should be a few hundred yards immediately *behind* you. As the geese come flying in low and slow against the wind (an off-shore gale is your best chance) to their food on the ooze, which they commonly seek when the 'flood' makes, you will occasionally enjoy some fine diversion as the birds come over. I have in this manner obtained, in rough off-shore winds, four or five shots within the hour. (Vide opposite sketch.)

(3.) If fowling in a double-handed punt, you can sometimes *drive* the Brent to your stanchion-gun, and I have killed many in this fashion (when they were so wild they would scarce let one look at them in the distance through a telescope).

If you observe a number of Brent—at low-water—far in on the ooze, a long way beyond range, and there is no possibility of stalking them, act as follows—

LYING SNUG IN A CREEK FOR FLYING SHOTS AT THE BRENT GEESE AS THEY COME IN FROM SEAWARD, LOW AND SLOW AGAINST THE GALE, TO THEIR FEEDING GROUNDS BEHIND US

Land your puntsman well to leeward of the Geese, and where he can crouch out of sight of the birds.

Next, and of course lying down in your punt, pole or paddle along till you are fair to windward of the Geese, though, perhaps, a quarter-mile from them. Steady and conceal your punt by means of a small sloping bank of ooze, and lay the big gun direct for the birds.

The puntsman, *when* he sees you are in position, should stand erect and walk towards the Geese; they will rise with loud cries, will avoid him, and, as they head the wind (which they are certain to do for some time after taking wing), they are very apt to shape their course *straight for you* and to thus afford a satisfactory *flying* shot.

You should be careful to place your punt so that the Geese cannot detect it till they are within firing-range, and this they are less likely to do if there is a *strong wind* to keep their flight *low*.

A flowing and late tide in the *evening*—the water just commencing to cover the last of their feeding-grounds about an hour before dusk—is *always* the most favourable one for stalking Brent Geese.

The birds, if hungry, are then a *little* less vigilant than usual, for they are eager to snatch their food on the flats ere it is overwhelmed by the rising flood; and, as they never, so far as I know, feed on the ooze at night, they are well aware they cannot satisfy their appetites again before the next day.

Endeavour to stalk Brent *down* the wind,* for they are sure to meet the wind on first rising, and will then offer, as they subsequently turn away, a flying shot to your one side or the other.

If you approach Brent *against* the wind, your progress will

* Wildfowl cannot detect your presence by 'scent' at three yards' distance if they are *up wind* of you, as I have often proved in my 'Duck Decoy,' and even when you are coming down the wind (especially if a strong one) they can seldom do so *before* you are in *ordinary* gun-shot (70 yards). Geese and Ducks are alarmed by noise and movement far more than by 'scent.'

be so slow that these shy and ever-restless birds (unless you happen to be working up a channel or creek *below* their sight) will oftener than not avoid you by springing up out of range, or by swimming rapidly away from the threatening danger.

If, too, you are stalking them with the wind *in your face*, the Brent, on taking wing, will at once fly straight *from* you, and only present their well-feathered sterns as targets.

In this event, even *if* in firing-distance, you will not kill *half* the number you would were the birds crossing to your right or left, with their heads, necks, and flanks exposed, as would occur if you were coming to them with a fair wind.*

The majority of shots at Brent with the stanchion-gun are fired when the birds are in the air ; it is very accidental to stalk near them *in the open* as they swim on the water or feed on the ooze.

One of the few methods by which you can achieve the latter feat is by poling, or paddling, along the steep side of a channel or creek that conceals your punt *till* you *suddenly* come within range *and* view of the birds (*previously* located) round a projecting point of mud.

If the Brent are high on the ooze, you may also, now and then, steal *unobserved* up a *low* channel till within easy distance. Point the big gun in the *direction* of the birds, though you cannot see them, and, as the flowing tide lifts your punt, fire instantly the muzzle of the gun bears clear of the top edge of the channel you are in.

Grey Geese are, as a rule, not so difficult to stalk as Brent.

The former frequent the ooze and sand-banks, to *rest* and *sleep*, *not* to feed, and as they commonly spend a great part of the day or night in one well-known resort, they are more regular and settled in their habits than Brent, and hence easier of access. You have, too, a chance of approaching Grey Geese at *dusk* and *dawn*, when your punt is not so conspicuous as in daylight, which

* You may sometimes obtain a side-shot at Brent by stalking them *across* the wind. In this case the birds will also fly to your right or left on taking wing, instead of directly from you, though they will not usually pass so near as when you are running to them with a fair wind.

is the only time, in my experience, Brent afford shots for the stanchion-gun in our islands.*

In many districts haunted by Grey Geese you will find these birds are wont to visit tidal water to wash and plume in for an hour or so *before* sun-rise. They then return to great bare fields or marshes to feed, or visit the isolated sand-banks of the estuaries to sleep.

NOTE.—The grand secret of killing Brent with the stanchion-gun is *not to fire long shots*, but to carefully select the few good chances which will surely, sooner or later, occur under favourable circumstances.

By closely studying the habits of Brent in the varied conditions of wind and tide, some idea may be formed as to where they are likely to commence to feed on the ground-ebb. If in the vicinity of some small island, patch of rocks, or other suitable back-ground, a shot may then frequently be obtained.

The punt should be kept out of sight until the Brent begin to collect over the higher ground and to touch their food, when with great caution a successful stalk may often be made.

Should Brent be seen swimming across your bows from deep water and making a point for these higher, though not yet uncovered, banks, they will probably allow the punt to approach in gun-shot right across their ranks. If headed by your punt coming *from* the feeding ground they are steering for, then the chance of a shot is very remote.

When setting to a gaggle of Brent crossing you as described, invariably allow the leading birds to just reach the spot they covet before you draw up in range, for the rest of the gaggle will certainly gain confidence, and thus be less on their guard, if they see their leaders unsuspecting of danger, and also engaged in plucking their food.

* I have seen, more often *heard*, Brent in our estuaries at night, but *only* for three nights before and three nights after *full moon*, when, if the sea is rough and the moon *bright*, they will then come in to swim about the tide-ways from about half-flood to high-water, and from the latter time to half-ebb. I have never known them to visit the channels of an estuary at dead low-water, or to sit on the ooze, at night, though it is, of course, *quite possible* they may do so during violent on-shore gales.

LETTER LIV

HOW TO MANŒUVRE AND KILL DUCKS AND WIGEON AT NIGHT WITH A GUNNING-PUNT AND STANCHION-GUN

THE illustration opposite explains how to approach Ducks and Wigeon by moonlight.

It will be seen the fowler is paddling *towards* the moon, and the birds he is stalking are plainly visible in the path of light cast on the water and ooze.

The Wigeon cannot discern the fowler, for he is coming to them from the *shade*.

This is the *only* method by which you can, by moonlight, see fowl at night unperceived yourself by them.

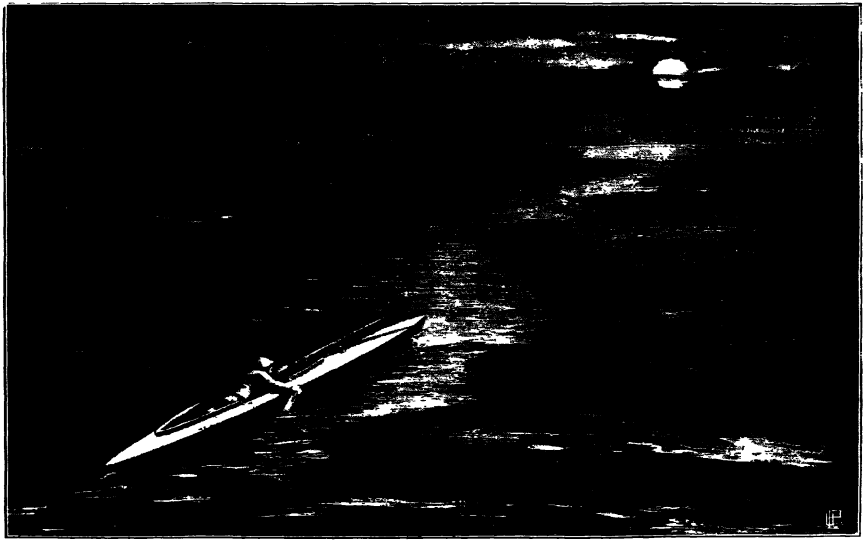
If, for instance, you were to try to stalk the birds with the moon *behind* you, *they* would be in the gloom and *you* and *your punt* would be illuminated, and hence all chance of a shot out of the question. Even the ripple of a pole or paddle in the sparkling water will alarm the birds at two or three hundred yards if you are *between* them and the moon.*

The most suitable *time* for gunning at night is when the moon

* I once achieved a curious shot at midnight with *no* moon or stars, and yet a *bright* sky.

I was returning homewards in the dark, Wigeon were piping and feeding all round and fluttering up within a few yards, though I could not see one of them. Suddenly the horizon was lit up by the flickering rays of the Northern Lights, and I was able to make a good shot and gather my score of birds.

[The old and vulgar belief had it (a common idea even now in parts of Norway and Sweden) that the unearthly glitter of the Northern Lights was caused by the reflection of the moonbeams on the vast wastes of ice and snow in the polar regions. It is a pity this supposi-



STALKING WIGEON BY MOONLIGHT

is *low* and *late*—her size half or three-quarters, and the sky bright yet partially clouded. A moon that is *low* in the sky will project a horizontal lane of light in which you can distinguish birds at a tolerable distance (see sketch facing previous page).

If the moon is shining clear and full in a cloudless sky, and is high above you, there is then practically no shade and her light is so diffused that the Ducks and Wigeon are liable to see you ere they are sufficiently near for a shot from the stanchion-gun.

A *late* moon enables you to go afloat from about two or three o'clock to dawn. The birds will then—if the tide is about *quarter flood* (as it should be)—be feeding greedily and in close rank.

From 'half-ebb' to low-water, and from the latter time to half-flood, or if the banks are uncovered *early* in the night, both Ducks and Wigeon will be widely dispersed, like rooks in a meadow, for they do not mass in companies till their feeding grounds are three-parts curtailed by the rising tide, or till they assemble an hour or two previous to daybreak for a final repast on the last stretch of ooze yet above the water.

A gentle wind is all that you require, just enough to ruffle, and thus slightly darken, the surface of the water.

If the night is quite calm and the moon fairly high, you will be continually running aground on the shallows, for the water and ooze in front of you will appear a uniform sheet of silver.

The wind should invariably blow *from* the direction of the moon into your face as you cruise in search of a shot, or when you are stalking fowl.

If the wind is *towards* the moon, there is no hope of sport. You will in this case be coming *downwind* on the birds, and they will *hear* and *scent* you before *you* can *see them*.*

tion is devoid of truth, for 'twas a weird fancy, and certainly one that would appeal to the imagination of the fowler on a lonely night in winter on the tidal flats.]

* Night shooting differs from day work in the matter of birds 'scenting' you. At the *short* range you are forced to approach within fowl at night, ere you can see them plainly enough to fire, they would be able to detect you by 'scent' if you endeavoured to stalk them downwind.

At night you will often locate fowl by the sound of their movements or cries carried to you on the breeze.

The rippling noise made by the bills of Ducks or Wigeon, as they dabble for food on wet ooze, exactly resembles that of the tiny trickles of water that are continually draining down the edges of the little cliffs of mud, so long as the tidal banks are exposed by the 'ebb.'

If, therefore, you hear this 'dabbling,' you need not feel assured it is caused by fowl *unless* it is accompanied by their *vocal notes*, however subdued these be.

The rush of a strong wind, as it sweeps over the water and ooze, and rustles in your ears, will prevent you from hearing the birds as they feed, and is, for this reason, an unfavourable one for night-shooting with the stanchion-gun.

When you locate birds by *sound* (you will do more in this way of a *calm* night than by *night*), remember there is *no hurry*; stalk as quietly up to your shot as possible.

If the 'spattering' made by the birds, as they feed, suddenly *ceases*, remain motionless, for all their heads are then up, listening for danger. When the birds recommence to feed, paddle cautiously ahead, your ears pricked (figuratively) like those of a fox.

When about to fire at fowl by *night* bear in mind they are usually much *closer* than you are in the habit of approaching them by *day*, and for this reason be careful not to shoot *above* them—a very common misfortune.

The same instant you pull trigger *shut your eyes*, or you will be so dazzled by the glare from the discharge of the gun that you will be unable to see the effects of your shot for some time.

You should, from being so near the birds, have very few 'cripples,' and you can find these by listening for them as they beat their wings against the ooze in their efforts to fly.

Stanchion-gunning by night is the *business* of the professional fowler in his single-handed punt, and in this manner he kills almost all his birds.

The gentleman gunner generally prefers his bed to encountering the bleak weather of an estuary in the small hours of the morning.

Still, I consider it a fascinating pursuit if fowl are plentiful, and I have greatly enjoyed gunning at night.

The double-handed punt preferred by the amateur is, however, not so well adapted for this sport as the smaller craft, for *two* men imply more *noise*, and, as a result, less likelihood of success.

NOTE.—Always strive, even by moonlight, to stalk, or seek, fowl with the loom of land or some other dark back-ground, such as trees, rocks, or clouds, behind you.

Though night-shooting with the stanchion-gun by moonlight is far more pleasant, still, if a calm bright frosty starlight night with a low and clear horizon should, for once in a way, chance to present itself, I advise you to go afloat.

On such a night as this the birds can be easily seen, especially on the ground-ebb; and there is, moreover, no necessity to stalk them from any particular direction in order to conceal the punt from their view.

LETTER LV

HOW TO FIRE A SHOT FROM THE STANCHION-GUN

THERE are *three requirements* of the *utmost* importance in connection with this subject [which, by the way, many a stanchion-gunner, did he live to a hundred and go a-fowling every day of his life, would never *collectively* attain] I refer to :

DISTANCE JUDGMENT
INSTANTANEOUS DECISION
QUICK ACTION

The power of correctly judging DISTANCE may possibly be gained by practice ; but INSTANT DECISION and QUICK ACTION are natural gifts and rarely acquired.

It is no easy matter as you lie full-length, face downwards, in a gunning-punt—your eyes a few *inches* only above the surface of the water—to tell how far the fowl you are stalking are from you.

You may, nine times out of ten, take it for granted the space between you and the birds is a considerably *longer* one than you *imagine* it to be, and that when within what you consider fair range, the supposed sixty or seventy yards is nearer eighty or ninety yards !

With a stanchion-gun you are never in *proper* killing range by day till you can plainly distinguish the *males* and *females*, and the *species* of the birds, or if the sexes are identical, as in Geese, note their coloration, the outline of their wings and tails, and their most prominent feathers.

It is *always* the case that the more *numerous* the fowl the *nearer* they look, especially if they are *large* birds.

For example, a company of Grey Geese at 100 yards distance will scarcely seem 60 yards from you, while a number of Wigeon or Teal at 100 yards will appear to be some 70 to 80 yards away.

Though a low and concealed attitude, when approaching fowl, is indispensable, still it is a *fatal* error to fix your eyes on the floor of your gunning-punt, and merely raise them to, the same instant, aim and fire the big gun. The attempt to suddenly adjust their focus from an object at a few inches (i.e. the floor of the punt) to one at about 70 yards (i.e. the birds) is sure to momentarily perplex the eyes and cause an incorrect calculation of distance, and a slow realisation of the exact position of the fowl; hence a delay in pulling the trigger and perhaps an unsuccessful shot.

The fowler, at *about two gun-shots*, should cautiously lift his head till he can just see the birds he is stalking along the barrel of the stanchion-gun; then, as he draws within range, he will be ready to take them on the wing if necessary, and, in any event, be able to form a good idea of their distance and situation previous to firing. Once the fowler *has* raised his head, he must keep it *motionless*; *if* he bobs it up and down, the birds are sure to detect the movement, though were he to remain steady their attention might not be attracted.

Instant Decision is essential *when* the *fowler is* in killing range, for, without a *moment's hesitation*, he will have to *make up his mind how* and *where* to place the shot-charge among the birds so as to bag the *largest possible* number, whether there be a score or a hundred to fire at.

Quick Action implies not the slightest dwelling on the *aim* or *trigger*, after the fowler *has* decided how the shot-charge can be sent to the greatest advantage into the birds, be they flying, swimming, or resting on the ooze.

There are two desiderata relating to a *successful* shot with the stanchion-gun which the young fowler should *always* study to secure.

I. To place the Shot-charge well among the Birds
II. To obtain a *line* of Birds in front of the Gun

(I.) If there are only eight or ten Ducks or Geese to shoot at, probably half the weight of shot in the barrel would kill them right enough; for even if the aim were *not* a very true one, yet the fringe of the circle of shot might be sufficient to lay low so small a number. Should there, however, be a *large* lot of birds, it is much more difficult to achieve the fullest execution.

In this case you will not only have to fire where the birds sit the *closest together* (often on the edge of the company), but you will also have to consider the elevation of the gun. If you aim *short* of the *bulk* of the birds, the best of the shot-charge will be wasted where they are most scattered, and the ricochetting, weak, and outside pellets may be those which alone reach the dense part of the gathering of fowl.

It is a safe rule, at or under 70 yards, to sight straight for the heads of a *compact* group of fowl, and just *above* the heads of the *nearest*, when the birds are stretched in a *line from you*.

(II.) It is obvious you will kill far more of them if you fire *along* a line of birds than if you fired *across* their line. If fowl are extended for 120 yards or so in front of the gun, you may kill them from 60 to 100 yards, for nearly all the shot-charge will have a *chance* of taking effect.

If, though, you were to fire *through* (i.e. across) the line, the shot may meet only quite a *few* birds in its course.

When afloat in your gunning-punt and you observe a line of Geese or Ducks in the distance, strive, therefore, to shape your course so that *as you come within firing distance* of the birds they offer a *raking* shot and *not* an intersecting one.

By a little manœuvring you can often manage this, particularly if the fowl are swimming in a *narrow* creek, or sitting on the *margin* of the ooze.

I have frequently obtained fifty to sixty Wigeon, at a shot, out

of a very *scattered* company resting *along* the *edge* of a channel. This I have achieved by manipulating my approach so that the birds finally presented, as I pulled the trigger, a long straggling line to the gun.

Had I on any of these occasions paddled directly for the birds as *first* viewed, and thus been forced to fire *athwart* their ranks, I should not have killed a dozen.

Shots at Fowl Swimming

These are *seldom* satisfactory, for, being partly submerged, you have only about *half* of each bird to fire at.

To make a good shot at fowl swimming they require to be not farther than 65 yards from you; the water will have to be *absolutely smooth*, the birds in *close rank*, and all *their heads up* as you fire.*

I have killed 50 to 60 Ducks, Wigeon, and Teal several times at a shot when they were on the water, but only out of dense companies of 1000 or more.

The same number on the ooze would, in each case, have realised near 100 birds.

If there is a slight breaking wave, or, worst of all, a small undulating roll from the sea, a successful shot at Ducks or Geese on the water, however numerous they may be, is impossible.

It is all very fine to *discuss* the *theory* of firing your big gun as you are, for half a second, stationary on the top of a wave or ground-swell, but in *practice* I have found such attempts *never* succeed, though *where* the bulk of the shot-charge flies to, whether to water or sky, I have no idea—not into the birds I will vouch —no, not once to every hundred times you draw trigger.

You may, *perhaps*, manage a flying shot if the birds spring together (which they rarely do in a bit of a sea); but 'tis almost if not quite as difficult to take a shot on the wing as on the water, if the latter is in a disturbed condition.

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* If you are within range of a number of birds sleeping or resting on the water, and your punt and stanchion-gun are under *perfect command*, rap a boot toe against the floor of the punt, or halloo; then, the *moment* the fowl *raise* their *heads*, let 'em have it, and you will kill fully a third more than you otherwise would.

SHOTS ON THE OOZE

Here we have each bird as large as life to fire at, and not, as when swimming, half a bird only.

When fowl are really *well packed* on the ooze I advise you, *if a beginner*, to pull trigger as they sit, rather than—*unless* you can depend upon the infallibility of your eye and hand—allow them to rise ere firing the stanchion-gun.

At all events you have your birds *as good as bagged* if you are within range and they are ashore. If you permit them to spring, in the hope of adding another dozen to the shot, you *may* experience a *clean miss* and curse your luck that you did not take them while in your grasp.

If fowl are resting and sleeping on the ooze, make a noise to startle them into momentary wakefulness, before you put an end to their existence. For 'heads up' means *many* more birds killed.

Remember, though, that fowl spring *much quicker* into the air from mud or sand than they do from water, and, for this reason, fire the instant they stretch their necks.

FLYING SHOTS

A Duck or Goose on the wing is much more liable to fall to the well-timed discharge of a stanchion-gun than if it were swimming or even resting ashore.

When a bird is flying we not only have its entire body to aim at, but we also have *all* its vulnerable parts exposed, and, as its wings are extended, the target presented is a *larger* one than if they were closed, and hence is more *likely* to encounter the shot.

If, at a distance of about 70 yards, the charge of a stanchion-gun is nicely scattered among 100 wigeon just as they all spring aloft, it will drop *at least* a third more birds that it would have done had it been fired *before* they lifted. The chief cause of this is that when a number of fowl are on the wing *all* the charge may be sent smack into them, for there are no ricochetting, short, or dropping pellets to go over or under the mark, as must *always* occur when birds are taken as they sit on the ooze or water.

Not one shooter in a score can, however, accomplish a *quick* and *clever* 'snap off' with the big gun at wildfowl as they rise.

The least hesitation in pulling trigger or indecision in aiming, and failure is certain.

A flying shot at a number of Geese and Ducks necessitates the eye, hand, and brain working very accurately and rapidly together; and besides this you have, at the moment you fire, to instantaneously judge *where* to direct the gun so that it will kill the most birds.

The grand secret of killing fowl on the wing with a stanchion-gun is to 'snap' at them when they are from 6 to 8 feet above the water or ooze—neither more nor less.

After the latter height the birds *at once* separate to gain space to freely use their wings, and a successful shot is not then likely.

You should cut 'em down as they all *spring up together*, for, being alarmed, their object is to hurriedly fly off, and for an instant they are sure to be confusedly hovering, crowded in the air, ere they dart away.

Advice as to whether the Birds should be fired at on the Wing, or as they sit on the Water or Ooze.

When within range of your birds you will have to *very quickly* decide whether to fire at them on the wing, or whether it would be wiser to take them on the ooze or water.

Though a flying shot, under *favourable* conditions, will, as explained on the previous page, surely bag a considerably larger number of birds than one taken at the *same* company as they swim or stand ashore, yet it is sometimes *risking failure* to permit them to rise.

To teach you how to act in this matter you will have to carefully note the *movements* and *position* of the birds you are stalking with a view to learning their *intentions*.

We will suppose you are just stealing in fair gun-shot (70 yards) of a couple of hundred Ducks, Wigeon, or Geese thickly clustered on a point of ooze or on *calm* water.

Your gun is directed for them, your heart beats audibly, your trembling fingers grip like a vice the trigger cord, and in the tenth part of a second you could (if you keep your wits about you) send the shot smashing into the company.

Now is the moment for decision and action, success or failure.

Should the fowl be *tame* and *quiet*, and their heads low, push on (if you can) till you are within 60 yards -no nearer, or the shot-charge will not *spread* sufficiently. The gun meanwhile to be laid to an inch on the densest part of the company. Give a loud whistle; every bird will raise its head, the distance being so short for the sound to travel.

The *moment* their heads are *up*, pull trigger; even then you will apparently kill some of the birds in the air, so nimbly do they toss themselves on wing to the flash of the gun.*

If you can *depend* on your *hand* and *eye*, allow the birds to lift clear of the ooze or water, and you will make a better bag; but recollect that, if a flying shot is to be a *good* one, the fowl require to be in considerable numbers, to be *closely* packed, and *to spring together*.

If, as you draw up to them, though not *quite* in firing range, the birds are *suspicious* and *restless*, and *all* their necks are stretched, prepare for a flying chance, for you will drop many more at a long shot in the air than you ever will at a long shot as they swim or rest. In this event be ready to send the charge a few feet above, and a little to the *right* of the *centre* of the company if the heads of the birds, just as they spring, are turned to the right, and to the left if their heads are facing in that direction.

As the birds are sure to rise against the wind, they will all spin round towards it a second or two before they take wing, and by acting as described the shot-charge will meet the *bulk*

* I have, with a strong side wind to blow the smoke clear, often seen Wigeon spring into the air 5 to 6 feet to instantly fall, the shot being fired as the birds were *resting* on the ooze, *not* as they were flying. I really believe, in such cases, the birds are dead *before* they jump off the ground, and that, the same moment they are killed, the muscles of their wings and legs involuntarily jerk their bodies aloft though life may practically be extinct.

or centre of the gathering, instead of the leeward, and, probably more dispersed, outside ranks.

Should some of, or half, the birds you are stalking, perhaps those nearest to you, have their heads up, and the others still be unsuspecting of danger, a flying shot is out of the question.

The birds that are on the alert, and *ready* to spring, are *certain* to rise *before* the others; and, though you might kill many of the *former*, the *latter* will in great measure escape, for you cannot shoot fowl in the air and on the water or ooze at the same shot.

In this case fire at them as they sit. A shot at birds *straggling* up is *never* a success. They will have to be either *all* on the water or ooze, or *all* in the air, when you pull trigger.

To all Stanchion-gunners

Never fire at fowl, however tempting they be, when positioned so that it is *very doubtful* if you will be able to gather the result of your shot; for a fowler's object is to *bag* his birds, *not* to kill, wound, and then lose them, as this would be not only wasteful, but cruel behaviour. I have many times stalked within easy range of large numbers of Geese and Ducks and refrained from pulling trigger, because I knew most of the dead and winged would fall on, or swim into, a rough sea or strong tideway in which I could not safely follow and retrieve them.

This is particularly the case when the wind is strong off-shore and the 'ebb' running out fast.

Again, a small island of low flat ooze, some way from land, may be densely crowded with Wigeon, but, if the 'flood' is rapidly covering it, by the time you have *made* your shot it will probably be *under water*, and (unless you have the aid of a boat and crew) you will, in stormy weather, then find it is impossible to pick up half your birds.

Under these circumstances leave the company in peace for a more propitious occasion.

LETTER LVI

ON RETRIEVING THE CRIPPLES AFTER FIRING THE STANCHION-GUN

I HAVE, in the previous letters, built and rigged out a fowling-punt for you, have told you how to manage it, have taken you up to the birds, and then instructed you in firing the stanchion-gun. A few hints on gathering the result of your shot may now be of service.

The first principles of killing the cripples—of which there will always be some, unless very few birds were fired at, and you were *close* to these—are (1) If the shot was taken at birds in the water, to instantly pursue and kill the *outside* and *farthest* cripples *first*.

(2) If the shot was fired at birds sitting on the ooze to kill the cripples that are *near the water's edge first*, and then get *between* the others and the *water*. (For the reason that wounded birds are far easier to overtake, and kill, on mud or sand than they ever are on water.)

(3) To use the shoulder-gun as seldom as possible, so that you may not unnecessarily alarm the fowl of the locality, and thus frighten them away instead of, perhaps, presently obtaining another shot.

(4) When you do fire the shoulder-gun, to make *certain* of your bird at *close* range, and thus save *noise* and economise *time*.*

You cannot be sure of stopping a cripple at beyond 20 yards if it is diving in the water. As the mark is so small, being merely the head of the bird, you will find a charge of No. 7 shot, from the numerous pellets it contains, is the most effective size to use. Even on the ooze you can, with your 12-bore, kill winged Brent and Grey Geese with No. 7 at 30 yards—if you aim, as of course you should, for their heads and necks.

* Every second is of value when you are pursuing a number of winged birds that are swimming, or running, from you in different directions. If you waste, for instance, several minutes over *one* 'cripple'—by not making sure of him at the first shot from the shoulder-gun—the interval may just allow two or three *other* wounded birds to steal away a long distance, to possibly escape.

You may often gradually manœuvre your cripples into a position where you can easily annex them if there is a bank of ooze or a creek at hand to drive them to.

The slightly wounded, as they are the strongest, will always steer for the roughest waves or the strongest tide, for concealment and escape, and these are the ones that are liable to go free if you do not out-flank and turn them shoreward in time.

Instantly the stanchion-gun is fired, ship the oars if the water is deep, and use the pole if it is shallow. You *cannot be too quick* in going up to the cripples, for they are apt to disperse in half a minute to all quarters of the compass.

When you fire a shot on the water, with no ooze near, and all the wounded are therefore swimming, hoist the sail of your punt if there is wind to fill it.

I have constantly picked up *all* my winged birds in this manner in one-third of the time I should have done had I rowed or poled my punt after them in the usual fashion.

A wounded bird, whether swimming with or against the tide and wind, will frequently travel through the water as fast as you can propel a gunning-punt—though, if you set sail, you may run up to him in a couple of minutes. A tiresome stern chase is thus avoided, and the risk of other cripples stealing off meantime as they *might* if you were *rowing* down a troublesome customer that dives, or flaps along the surface—is greatly lessened.

Never follow a cripple into rough water. This, in a gunning-punt, means *danger*; your life is worth (to you) more than an additional bird or two.

'Row away, paddle away, more to the right, more to the left, fifty yards farther, and we have him.'

This is suicidal folly, if the wind is *strong off-shore*, the tide *ebbing*, and you are *leaving* the protection of the *land*. During the excitement of trying to overtake some vexatiously active Duck or Goose, you little realise how *rapidly* you are quitting the shelter of the shore. The 'few yards farther and we have him' generally ends in the bird escaping, as the water becomes more turbulent through gaining every moment a longer drifting space.

At length you give up the pursuit as hopeless, and, having leisure to look about you, realise your critical situation, for you are a mile from shore, with a nasty breaking wave and a hard wind and tide to overcome ere you can regain safety.

When you reach land (as I trust you may) subsequent to an hour's arduous struggle, and taking much water aboard, you have cause to be thankful that you did not follow the miserable bird 'just a little farther.' Anyhow you will doubtless have had a useful lesson in caution that will last your gunning days.

One final wrinkle. If you see a wounded bird on the ooze with *head up* and *wings closely shut* (i.e. no sign of one or both trailing down), never fire a long shot at it with the shoulder-gun. The bird is probably only *stunned* by a stray pellet from the big gun, and a charge of small shot at 40 yards will possibly but smarten up his senses so that he flies away.

You may commonly walk within 20 yards of a Duck or Goose that is in this dazed condition, and hence make *sure* of bagging the bird.*

In connection with gathering the cripples after a shot from the stanchion-gun, the sketch opposite is of interest. The incident depicted is one that has occurred to me at home and abroad, sometimes when I was miles from dry land.

Both before and (as shown here) after I have slain the wounded, I have, on several occasions, been startled by a loud 'swish' of wings close past me—a noise caused by the rush down from the clouds of a Peregrine. At such times the bird is so intent on procuring food that it ignores danger. However, for my part, I would as soon shoot my favourite dog as fire at a Falcon or Tiercel when we meet on the wild wastes of water and ooze off the coast, and when both of us are, it may be said, sporting in company.

* A wounded bird lying flat on the ooze with its neck stretched out at full length, can also usually fly. Female Wigeon are much given to this manner of concealment, their dark tints harmonising with the surrounding mud or stones.

ANOTHER SPORTSMAN ON THE SCENE, OR 'TAKE ONE AND WELCOME, YOU SPLENDID FELLOW'

LETTER LVII

ADVICE IN THE SELECTION OF VARIOUS ARTICLES REQUIRED IN STANCHION-GUNNING THAT HAVE NOT BEEN ALREADY ALLUDED TO

POWDER

THERE are two excellent and well-known varieties, and which differ only in the size of their grain:* Colonel Hawker's and Captain Latour's. On no account load a stanchion-gun with a smaller powder than either of those mentioned (fig. 92).

FIG. 92.—STANCHION-GUN POWDER†

A charge of several ounces of ordinary sporting powder, sufficient that is for a stanchion-gun, will drive the shot erratically and weakly, and, from its rapid combustion, produce an excessive recoil and possibly burst the barrel.

PRIMING

If your gun is a muzzle-loader and needs 'priming,' never use a very fine powder for this purpose. Fine powder is so susceptible to the damp attendant on salt-water that it is apt to cake in the nipple, and hence cause a miss-fire by clogging the passage to the interior of the barrel.

COPPER CAPS

These should be stored in a small, well-corked, glass bottle, as being the *only* plan to secure them from *all* risk of a hang-

* A nitro-compound is, I find, quite unfit for use in a stanchion-gun.

† If a fowler is driven by force of circumstances to use a fine grain, he should reduce his powder and his shot-charge one third.

fire. If copper caps are kept in the tin box in which they are supplied by the dealer, they are liable to be deteriorated by the moist air of the coast.

Obtain the caps that are turned up (like a hat) round their rims, for these can easily be removed from the nipple of the gun.

SHOT

The tendency of nearly all stanchion-gun shooters is to use shot of too heavy a description. They forget that the larger the shot the wider apart the pellets are in the pattern thrown by the gun. The first thing is to *strike* the mark, and the greater the number of pellets in the charge the more likely are the birds to be *hit*.

I here allude to firing at fair range, 60 to 70 yards, at DUCKS and WIGEON, and not to wild random shooting at 150 yards.

In the case of GEESE, if they are on the *wing* and *numerous*, *heavy* shot (as SSSG) will sometimes do excellent work from 100 to 120 yards. At 100 yards it is, however, practically useless to pull trigger at even these large birds, should they be resting on the ooze or water; for though a *few* may be killed and many wounded, that is *not* fowling as it *should* be, nor worthy of the name of sport.

THE SIZES OF SHOT ADAPTED FOR STANCHION-GUNNING, BOTH IN RELATION TO THE DIFFERENT BIRDS, AND THEIR DISTANCE FROM THE FOWLER WHEN HE FIRES AT THEM

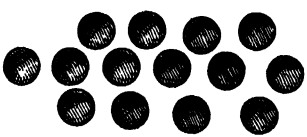

FIG. 93—SSSG.

SSSG.—18 to 19 pellets weigh 1 oz.

'For GREY GEESE (or SWANS), or for long *flying* shots (100 to 120 yards) at BRENT GEESE.'

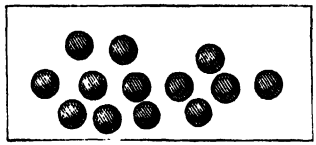

FIG. 94 - AA

AA.—40 to 42 pellets weigh 1 oz.

'For BRENT GEESE on the ooze or water at from 70 to 80 yards; 80 to 90 yards *if on the wing*.'

I exclusively use AA for BRENT GEESE, whether the birds are flying or resting, for it will kill them effectively up to 80 yards, which is as far as I usually care to fire. AA is the largest drop-shot, and though not always of regular outline, it is *much the best* for BRENT GEESE. AA also answers well for DUCKS and WIGEON at long range (80 yards), provided a gun carries not less than 1½ lb.

If a gun shoots only 1 lb., the pellets in a charge of AA are then too few, and the pattern, in consequence, too open for DUCKS.

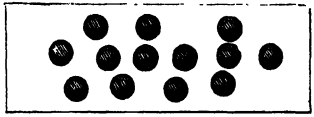

FIG. 95—BB

BB.—50 to 56 pellets weigh 1 oz.

'For DUCKS and WIGEON in the winter, when they are thickly feathered and you seldom come nearer to them than 70 yds.'

FIG. 96—B

B.—75 to 80 pellets weigh 1 oz.

'For DUCKS and WIGEON in the autumn (October), when

they generally permit a closer approach than in the winter, and are not so densely plumaged as in the latter season.'

If you are likely to stalk Ducks or Wigeon to within a range of 60 yards, as *may* occur abroad, or in hard weather at home, this single B is the most deadly size to load with.

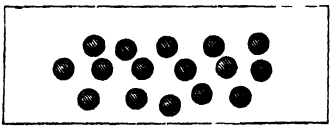

Fig. 97—No. 2

No. 2.—100 to 105 pellets weigh 1 oz.

'For Ducks and Wigeon at *night*, when you commonly fire at from 40 to 50 yards.'

Should you have a chance at a number of Teal this is the correct size, as it equally is for Plovers, Knots, and Godwits.

* * * *

The manufacturers, unfortunately, all differ in their samples of shot, in accordance with the diameter of the holes in their respective sieves.

For this reason, when ordering a supply, give [as here furnished] the *number of pellets per ounce* to indicate the size of shot you require. If you merely quote the letters or numerals you will rarely obtain what you want.

CLOTHES

The warmest, most durable and water-resisting, substance for gunning afloat is thick blanket flannel, or what is called by the drapers White Baize.

The jacket to be double-breasted and almost as short at the hips as a schoolboy's. A long coat will soon be in a soaking state at its lower edges, has no advantage over a short jacket in the matter of warmth, and, from its bulk, is often much in the way.

Be sure the tailor shapes your jacket so that it buttons easily across the chest and will, if necessary, fasten high round the neck. Have large buttons and button-holes, the former sewn through the flannel to pieces of leather the size of half-crowns.

Let the waistcoat have two ample pockets, roomy enough to *each* hold a dozen small-gun cartridges in the event of a jaunt on the ooze after a *few* cripples.*

The trousers to fit the leg below the knee and to button round the ankles.

Over the trousers, and halfway to the knees, a pair of thick woollen socks.

NOTE.—Two *thin* and loose-fitting merino vests, worn over one another next your skin, will be warmer than a single flannel shirt, however thick, and much more comfortable and easy to work in. In the former case the natural heat of the body is retained between the double layer of material.

CAP

Like a ship-captain's, a peak in front but none behind. If you have a peak at the back of your cap, this will knock against your shoulders and tilt the front of the cap over your eyes when you are stalking birds.

The cap can be of white baize—best of all of thin, untanned leather—or—if you are very desirous to escape the notice of wild-fowl—of grebe-skins.

A pure white linen cap, unless you are in the midst of ice and snow, is far too conspicuous.

GLOVES

Soft woollen gloves soon fray to rags from the friction of handling a pole or paddle. Gloves of knitted *whipcord* will last a winter and are nearly as warm as woollen ones.

WADING-BOOTS

Leather, and reaching to near the thigh. Indiarubber boots are most unhealthy, and a tramp in them on the ooze will induce your feet and legs to perspire profusely, to subsequently become very cold, and, as these boots are ready-made, they never *fit*, and will chafe the heels if you run or walk in *them*.

* These cartridge pockets should be low down in the waistcoat and protected by thin flaps. You can very conveniently keep some reserve ammunition for the shoulder-gun perfectly dry in this way. The *small* pocket for watch or money higher up.

Be careful your boots are *easy*, particularly at the *ankle*, where a broad soft strap (shaped like a spur-strap), will save them from drawing off in adhesive mud. If your boots are in the least degree tight, they will, by checking circulation, 'numb' the feet, and the force required to drag them off is sure to stretch their stitches and make their joints leak.*

All boots for stanchion-gunning ought to have a strip of sheet copper nailed round the point of each sole and an *extra* cap of strong leather over either toe, else these parts will quickly rub away from contact with the floor of the punt when you are lying down to stalk fowl.

Long fowling boots should have no lining, as this 'crinkles' from damp and shortly becomes in a soppy and loose condition.

If your boots are put aside, hang them up with some hay in their interiors to extend the leather and save creasing; never barley or wheat, as this is too heavy and strains the seams.

Screw your boot-jack to a corner of the floor of your room; much trouble will thus be saved in looking for it, and, if a fixture, your boots can be at once pulled off.

OILSKINS

For rough use on the coast, and to turn wet in *all* weathers, no waterproofs can compare with the sailors' yellow oilskins. Do not purchase the 'reach-me-downs,' but procure the oiled linen and have a strongly sewn coat made up from it by a tailor.

For protecting the lower half of the body from rain, snow, spray, and a wet seat, an oilskin *petticoat* that buckles round the waist and falls to just below the knees is far pleasanter to wear than short oilskin trousers. In the petticoat you are able to walk and *run* freely, or even *swim* in if you tumble overboard; in trousers you will be so 'tied up' and hot that a wounded Duck can often outpace you in soft ooze.

In the summer, suspend oilskins so that the air may have access to *all parts* of them. If folded they will stick together as though glued, rend in separating, and be of no further service.

* Be measured for duck-boots in *three* pairs of thick stockings; you need only *wear* one pair, but you will, in this way, dodge the bootmaker, who would otherwise build the boots to fit as tight as a glove.

GLASSES

Field-glasses for general use by day and night, and a telescope for ascertaining at a distance, by day, the *species* of the birds. Field-glasses can alone be used at *night*, and should then have their rack and pinion lashed from moving, so that they may always suit for distinguishing fowl from mud and weed at a distance of 80 to 100 yards.

A deer-stalking glass, with its several joints, is a nuisance when you are gunning afloat, it takes so long to adjust to the sight.

The old-fashioned *single-draw* marine telescope is the best to use, because you can regulate its focus to the eye without any delay.

As you will be constantly 'spying' in search of fowl when aboard a gunning-punt, you require to have your field-glasses very accessible.

A small water-tight wooden box, that nicely fits them, is a safe and convenient receptacle. This box may be laid on the floor of the punt, and you can lift its lid and take out the glasses in a moment, which may be temporarily kept therein *without* their leather case.

SHOULDER-GUN, i.e. CRIPPLE STOPPER

If able to afford one, purchase a 'hammerless.'

In the haste of snatching up the shoulder-gun—to kill a wounded bird, or one flying past—a gun with hammers is very liable to have these rapped off against an oar, a pole, or some abrupt angle of the punt.

A shoulder-gun with a sling-strap to it is a great convenience. Keep the sling *detached* from the gun and hook it on when you go ashore to chase 'cripples.' You can then sling the gun on your back and have *both* hands at liberty to carry your birds, or you can hold the birds in one hand and grasp a short *forked* pole in the other. A pole is of great assistance to steady your progress over slippery mud, to fathom the depth of small creeks you have to wade across, and to pin down the necks of wounded birds with.

A strong, plain, full-choked, 6¼ lb., 12-bore double gun with 28-in. barrels is the one for 'cripples.'

SHOULDER-GUNS FOR GENERAL USE WHEN FOWLING

For shooting at fowl from the shoulder, whether you are afloat in a gunning-punt or tramping the shore, you will find a No. 12 bore is the most convenient and successful weapon to use.

The large shoulder-guns may kill more birds, out of a company, if aimed over the top of a sea-wall or the gunwale of a boat; but for ordinary sport they are too burdensome and unhandy to do good execution with.

A gun of this kind is so heavy to lift, and slow to manipulate, that by the time it *is* to the shoulder a bird rising near you will often have flown out of range ere you can draw trigger on it.

With a lighter weapon you may fire at your bird before it has flown six yards, and make more certain of killing it than you ever could with the over-balancing barrel of a 10-lb. gun.

Toiling through a day with one of these big shoulder-guns so wearies the arms that it is difficult to aim properly with it when a chance occurs of bagging a Duck or a Goose.

Many times, towards the evening, when with an 8-bore pressing like a log on my shoulder, and a bag full of birds on my back, have I felt inclined to pitch the unwieldy monster into the nearest ditch rather than endure the drudgery of bearing it home.

I have, in regular succession, tried every description of shoulder-gun on wildfowl, from 2-bores and double 4-bores down to 20-bores, but have always experienced I could *bag* more Geese, Ducks, and Plover *in a season* with a powerful No. 12 than with *any other* size. A *fully choked* (here requisite) No. 12, weighing 7¼ lbs. and firing 3½ drs. of powder and 1¼ oz. of No. 3 shot, will kill Brent, Ducks, or Grey Geese up to 50 yards.

This volume completes the Series of Letters to Young Shooters, namely:—

1st Series—The Choice and Use of a Gun.
2nd Series—The Preservation and Killing of Game.
3rd Series—Wildfowl, and Wildfowl-shooting.

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