

THE DEAD SHOT.



THE SPORTSMAN'S COMPLETE GUIDE.





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THE DEAD SHOT.

OPINIONS OF THE PRESS

ON PREVIOUS EDITIONS OF THIS WORK.



"IN THE DEAD SHOT, sportsmen will find expounded the most scientific and difficult problems of the art of killing birds on wing. . . . The causes of missing, and errors of young sportsmen in the field, are clearly and ably explained. . . . The book should be read twice or three times in the season by everyone who desires to improve his style of shooting."—*The Sporting Review*.

"THE DEAD SHOT is in every respect the best work on the art of shooting for the young sportsman. It comprises a searching and clear exposition of the secrets of good shooting, with the best practical instructions in dog-breaking. All who read it will assuredly profit by its truthful and convincing explanations. Bad shots, nervous and inexperienced sportsmen, who peruse this little treatise, will find much light thrown on the mystery of shooting with unerring precision."—*Sporting Magazine*.

"THIS is the most complete sportsman's manual that we have yet seen ; and we feel a pleasure in recommending it to the notice of everyone who carries a gun after game, whether he be an old hand or a mere tyro. If the former, he will find much to enjoy in the record of work cleverly done, together with a profusion of useful hints that cannot fail to satisfy and please : if the latter, in MARKSMAN he meets a friend, who will lead him from the first rudimentary lesson in handling a gun to the proficiency of a Dead Shot. We have not read a more useful or agreeable sporting book for a long time, and heartily recommend it to every sportsman, old as well as young."—*Era*.

"MARKSMAN'S opinion is entitled to respect, because he shows in every page of his book that he understands the subject of which he treats. His advice to young sportsmen is brief, clear, and practical ; and we believe that he who acts upon it steadily cannot fail to improve his shooting ; and, if Nature has given him a quick eye and steady hand and nerve, he will have placed himself in the right road to attain the reputation of a Dead Shot."—*Saturday Review*.

"WE fully believe that the careful study of this book will be equivalent to a considerable amount of practice, in fitting a man to do his work in the field with credit to himself. The Author writes like a man who thoroughly understands his business. His maxims are all plain, intelligible, and founded on common sense The book is full of practical and precisely-expressed rules, which are fully supported by reason ; and which, if they are carefully observed, will bring anyone, with a reasonable amount of practice, steady nerves, and a good eye, up to the level implied in the phrase 'a Dead Shot.'"—*John Bull*.

"THIS is a capital little book, the work of a man who thoroughly knows what he is writing about. The Volunteer movement has naturally led to the publication of several treatises on the use of the rifle ; but we do not call to mind any one that so completely comes up to our own notion of a useful manual of the science of shooting as this of MARKSMAN'S. We feel quite sure, that by a close adherence to the rules and instructions here given, the shooter cannot fail to become a good shot, and will very probably become a Dead Shot."—*Morning Chronicle*.

"TO teach the novice how to handle a gun, and to hit with certainty, and to cure defects in bad marksmen, is the object of the DEAD SHOT. Commencing with the gun itself, MARKSMAN enters *con amore* upon his task, and proceeds from the A B C of the art to the utmost limits which theory can reach. Directions for Dog-breaking are added, so that the DEAD SHOT is, as its title professes, the SPORTSMAN'S COMPLETE GUIDE."—*Morning Post*.



BANG ! BANG !

DEAD SHOT

SPORTSMAN'S COMPLETE GUIDE

THE HISTORY OF THE SPORT

WITH ILLUSTRATIONS BY THE AUTHOR

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W. C. MAUSER

NEW YORK

1898

THE
DEAD SHOT

OR

SPORTSMAN'S COMPLETE GUIDE :

BEING A TREATISE ON

THE USE OF THE GUN.

WITH RUDIMENTARY AND FINISHING LESSONS IN THE ART OF
SHOOTING GAME OF ALL KINDS, AND WILD FOWL :
ALSO PIGEON-SHOOTING AND DOG-BREAKING.

BY MARKSMAN.

FIFTH EDITION.

LONDON :
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1882.

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1882

PREFACE

TO THE FIFTH EDITION.



THIS work has now been several years out of print, for the reason that the author could not spare time to bestow that care and attention upon a new edition which, in his view, it imperatively demanded.

The welcome reception afforded to previous editions of the work, has encouraged the author to devote his best energies towards rendering this as full and complete as possible upon every branch of the art of shooting. And accordingly, much new matter has been added throughout the entire work. Besides which, several subjects not included in either of the previous editions have been introduced for the first time within the pages of this; notably, those on the various branches of wild-fowl shooting; which, like the rest of the work, are founded entirely on

the author's individual practical experiences, extending, now, over the long period of upwards of thirty-five years.

The emendations and additions have, therefore, been so considerable that the present edition is more than double the size of either of the previous ones.

The whole of the engravings are also entirely new. Most of them are intended merely as illustrations (photographed from life) of the safe and proper modes of handling, holding, carrying, and using the gun.

In this edition, as in the previous ones, the main object of the author has been kept in view, viz., that of placing in the hands of young Sportsmen a complete guide to the safe and skilful use of the gun, in every branch of the art of killing birds on wing; with notes also on the haunts and habits of game and wild-fowl, and on the best modes of beating for and approaching the same; with special instructions also in the breaking and training of dogs for the gun, and in the management and control of them in the field.

In the early days of the author's own career as a Sportsman, he felt the want of a work of the kind: he has therefore endeavoured to supply the vacancy, in the hope that some of his junior brothers of the trigger may see reflected in its pages their errors, failings, and causes of ill-success. They are therefore invited to study, first, the rudimentary principles enunciated in the early part of the work; and then to follow on with the finishing lessons, combining therewith from time to time practice in the field with dog and gun. And if all such be attentively considered, and steadily pursued, the author conscientiously believes that, sooner or later, their efforts will be crowned with complete success, and many a bad marksman cured of his defects; whilst many an intelligent young Sportsman may acquire such proficiency in the art of shooting, as to be able to hit, with unerring certainty, the swiftest birds that fly; and so obtain for himself the reputation of a "Dead Shot."

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THE DEAD SHOT.

I can, I'll not the truth disguise,
Myself kill bees and butterflies,
While flying quick from flower to flower.
Tomtits and sparrows, pippits, larks,
Are all to me as easy marks.—W. WATT.

WHO, AND WHAT, IS A DEAD SHOT.

A "DEAD SHOT" is a SPORTSMAN in the truest sense of the word; he is one who is thoroughly master of the art of shooting, and who can be sure of his bird let it fly off in whatever direction it will, so long as it takes wing within range of his gun. Whether flying slow or fast, to right or left, rising or descending, flying overhead, down wind, up wind, or across wind, in a strong wind or a dead calm;—in one and all, the bird is an unerring mark to a "Dead Shot." And he does not merely wing or wound the bird, so that there is considerable difficulty and delay in recovering it; nor, on the other hand, does he cut and mangle it, so as to render it unfit for the table; he simply kills the bird by

hitting it in one of the most vulnerable parts of its body; it fairly dies in the air, and drops dead to his unerring aim. There is no need to rush forward in an unsportsmanlike manner to pick it up for fear of its straggling away, for where a dead bird falls, there it lies; and when the gun is reloaded, the "Dead Shot," as well as his dog, knows where to find the bird.

A "Dead Shot" is also a man of cool, calm, and collected demeanour; he is neither hasty nor nervous; he never appears to make a very quick or sudden movement in shooting; and yet, if a brace of birds get up within range of his gun, they are no sooner on fair wing and at fair range, than down they drop, as if by mechanical contrivance, first one and then the other, to his deadly aim. All his movements are easy and apparently slow, and yet the quickest bird never escapes him.

A "Dead Shot" is, too, of necessity, a ready and accurate calculator of distances; also of the velocity of flight and speed of the objects of his sport. If it were not so, it would be impossible that he could kill with so much certainty. He estimates, intuitively, the distance at which a bird rises, and the rate of its flight, and so he never shoots out of range; for it is no sport to him to wound his birds and not to bag them.

The pleasure to be derived, and the instruction to be gained by a young sportsman through being an

associate with a "Dead Shot" can only be appreciated by those who have had the advantage of actual sport in company with him. A few days' sport with such a man never fails to enkindle in the breast of a young aspirant, a thorough sportsmanlike feeling.

To shoot as a "Dead Shot" shoots is the very ambition of those who delight in the use of the gun; but such skill cannot be acquired without a patient training and painstaking attention.

A "Dead Shot" is by nature gifted with the physical qualities pertaining to good shooting; particularly those of precision of the eye and hand, with steadiness of nerve, and good muscular power. Similar if not identical qualities are usually found in skilful cricketers. But whatever the talent, a man can no more become a "Dead Shot" than he can a good cricketer, without considerable practice and experience.

A gun, like a cricket-bat, requires practice in the use of it: and the art of finding game, beating the field, and other sportsmanlike accomplishments, require to be as practically taught and learnt as the various qualifications that belong to the dextrous handling of the cricket-bat.

True it is that some persons are far more apt than others, and take to shooting with an early success; whilst others spend the best part of their lives in endeavouring to acquire proficiency in the use of the gun, but are never able to accomplish it.

There are many good sportsmen who are excellent marksmen, and who shoot fairly well, and kill a great many birds in the course of the season: some of such sportsmen may be termed "good shots;" but they are, nevertheless, far from being "Dead Shots."

A man is very far from being a "good shot" who misses half his birds; and he is a very "bad shot" if he merely wings or wounds at fair distances, when he ought to kill: and no game is considered killed that is not bagged.

Where game is abundant, a great many birds may be killed in a day by a very ordinary marksman; but he who, with few birds and few shots, fills the game-bag, is, at least, a "Sportsman," if not a "Dead Shot."

Finally a "Dead Shot" is like a well-trained lawyer: the one is a man of few shots, but they always hit; the other, of few words, but they are always to the point.

THE GUN.

As the gun is the instrument with which the sportsman kills his birds, and by the skilful handling and use of which he acquires the art of the "Dead Shot," it is obvious that he should have sufficient knowledge of its component parts, and of

its form and construction, to enable him to use it with safety and effect; and also to choose one to suit him, having regard to the length of his arms, and neck: for unless the gun fits him he will never shoot well.

The reader will, however, kindly bear in mind that this little book is not the production of a gunmaker, but of an English sportsman; therefore the observations under this head will be confined to such only as, in the opinion of the author, every sportsman should be familiar with.

The guns of no maker in particular will be recommended; the author's object being, not that of puffing the guns of any individual gunmaker, nor even that of advising his readers of whom to buy a gun; but how to choose one; and having done so, how to use it; of whosoever invention it be, by whoever made and of whomsoever bought. For whether it be breech or muzzle loader, and whether plain or choke bore, percussion, central fire, hammerless, or otherwise, the requisite skill and precision in the use of it are the same.

The gun is composed of three principal parts,—the barrel, the stock, and the lock.

The barrel.—The size of the barrel of a shoulder gun is determined by its gauge or calibre, which is ascertained by means of a spherical bullet fitting exactly into the barrel; and the number of such bullets which make up a pound in weight, designates

the number of the gauge of the barrel. Consequently the smaller the number, the larger the gauge, as for instance—No. 4, which indicates a large bore, such as is used for shooting wild geese and the larger species of wild fowl; whilst No. 20 indicates a gun of very small bore, such as is used for shooting snipes and the smaller sized birds.

Gunmakers are always provided with a barrel-gauge, on which the gauge numbers are marked; so that by dipping it into the muzzle of the gun, the gauge can be immediately ascertained.

Gun-barrels that are made of the best quality of gun-metal contain a large percentage of laminated steel, and are well and carefully welded. Gun-barrels so constructed are at once the safest and most serviceable, though of course the most costly. Inferior barrels are made of a cheaper kind of gun metal, less elaborately wrought and welded. The latter may last a long time, with care in the use, and by loading with small charges; but they are liable to be burst on being heavily charged; particularly after long usage.

The elevated rib which divides the barrels, is, with some sportsmen, an object of first importance; because, in proportion to the elevation of the rib at the breech-end of the barrel, so the gun throws the shot above or below the horizontal line of aim.

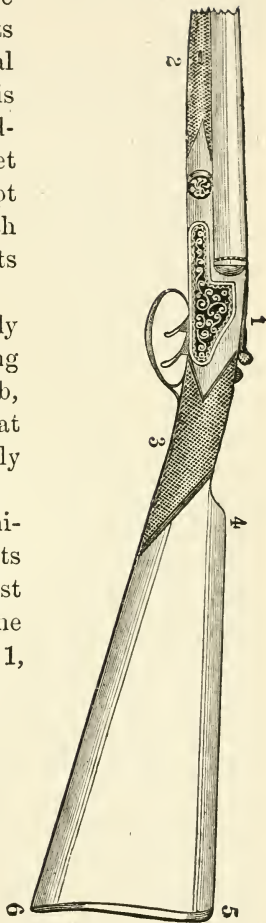
Young sportsmen will do well to avoid using “low-

..shooting guns"—*i.e.* those which throw the centre shots of the charge under the visual line of aim. Guns of this defective construction are old-fashioned, and seldom met with at the present day except in ancient flint-guns, which have now become mere objects of curiosity.

The remedy consists chiefly in the barrels of the gun being provided with an elevated rib, or made stout and thick at the breech-end, but gradually tapering to the muzzle.

The gun-stock.—The technical names of the various parts of the gun-stock will be best understood by reference to the annexed engraving. No. 1, is the head, 2 the fore-end, 3 the neck or grip, 4 the comb, 5 the heel, or bump, and 6 the toe.

It is of first importance to the shooter that the length and bend of the gun-stock be suit-



able to his stature and length of arms and neck (or "build").

The "cast-off" is the outward inclination of the stock at the butt-end, from the longitudinal axis of the barrels.

The object of the "cast-off" is to bring the rib which divides the barrels, in line with the eye of the shooter, without the necessity of flattening the cheek against the gun-stock.

A gun-stock that is long and much bent, is commonly said to be "high mounted:" whereas one that is short and nearly straight is "low mounted." If the stock be too straight the sportsman will be apt to shoot too high. A short man with short arms and neck requires a low-mounted gun. A tall man with long arms and neck requires one high mounted.

It is, assuredly, a very important element in the gun that it be fitted so as to suit the length, or grasp, of the shooter's arms, neck, and shoulder, or it cannot always be brought up quickly and truly to the eye. On the gun being brought to the shoulder, if on taking aim, the barrel and muzzle appear to slope downwards, it indicates that the stock has too much bend. If, on the other hand, the muzzle seems to point upwards, the stock is either too straight or too short, or the slope of the butt-end is wrong; or, in other words, the angle of the gun from muzzle to heel

is incorrect; and therefore the gun does not fit the shooter.

A man whose neck is long cannot use with effect a gun with a straight stock; nor can a man with a short neck do so with a gun which has a stock that is much bent.

If you find you have to move your head about to right or left to enable your eye to catch the sight-piece, the gun does not suit you.

The gun that comes up to the shoulder with most ease and accuracy, without any straining of the neck on taking aim, is the one with which the shooter will do most execution.

Sometimes the shape of the heel-plate is the primary cause of the gun not coming up to the shoulder in true position; this may arise from either toe or heel, or both, being too prominent.

The balance of the gun is also a very important element for consideration; for an ill-balanced gun is very unhandy and uncertain on being brought up to the shoulder. If too heavy at the butt, the gun comes up to the shoulder with the muzzle at too high an elevation, whereby the shooter is prone to fire too high. If too heavy at the muzzle-end, the shooter is apt to fire too low.

It is the gun-maker's business to take care that the gun is properly balanced before it is finished off; but it should be the shooter's care to detect the fault before he buys the gun.

Gun furniture.—The furniture of the gun usually consists of the triggers, trigger-plates, trigger-guards, heel-plates, &c.

Gun mountings.—The mountings of the gun consist of fore-end fasteners, safety-bolts, thumb-pieces, nipples, strikers, sights, horn-tips, and screw-pins.

Other parts of a modern gun are, levers, bolts, and wedge-fasteners, for opening and closing the breech, and bolting and otherwise securing the barrels to the stock ; hinge pins, standing breech, cartridge-extractors, safety bolts, and indicators, &c. &c.

Gun-locks.—The gun-lock constitutes the machinery for cocking, uncocking, and (with the aid of the trigger) setting the hammer in motion, and firing the charge in the barrel: it therefore forms a very important and interesting part of the gun. Those which are of the best and most finished workmanship have the finest and quickest action—a highly desirable feature in a gun—and such are, besides, the safest and most durable.

Technical names relating to the parts of Gun-locks.

Bridle : the piece which caps the tumbler, and by aid of three or more screws, holds various parts of the lock to the lock-plate.

Exploding pin : this is no part of the inside of the lock, but is fitted to the nipple of the standing-

breech : it is the pin which explodes the cap inside the cartridge.

Hammer or striker : the moveable piece outside or inside the lock ; which, on the trigger being pulled, strikes the pin or nipple, explodes the cap and fires the charge.

Lock-plate : the flat surface forming the outside of the lock ; to the inside of which the various parts are screwed.

Main-spring : the larger steel spring which, on the trigger being pulled, causes the hammer to strike the pin and explode the cap.

Scear : the piece which catches the tumbler, on the hammer being moved to half or full-cock.

Scear-spring : the small spring which holds the scear in the notches of the tumbler at full or half-cock.

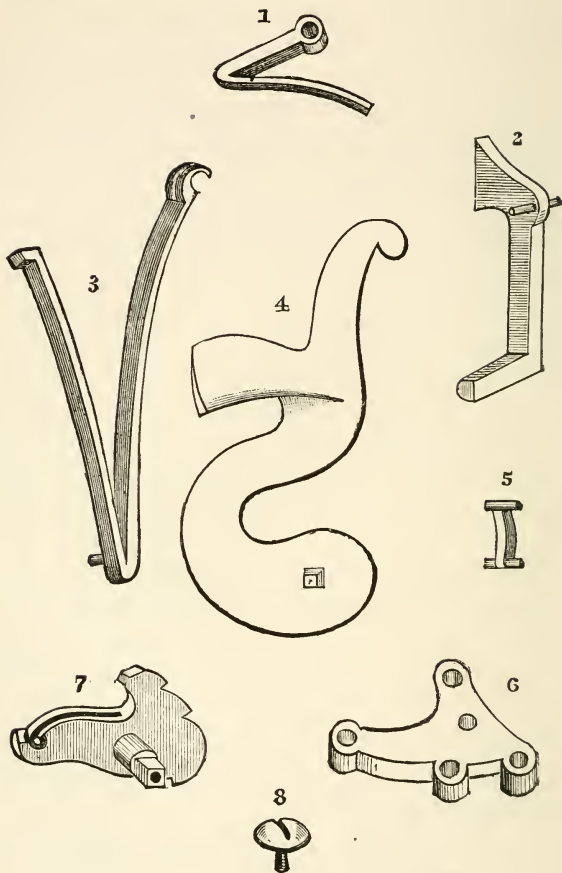
Spring-cramp : a most useful little instrument for taking off and replacing the main-spring of a gun-lock.

Swivel : the smallest piece of all, one end of which fits into the neck of the tumbler, the other end being held in the claw of the main-spring.

Tumbler : the moveable centre-piece subservient to the hammer and scear.

Tumbler pin : the outside screw which secures the hammer to the tumbler.

In hammerless guns, the tumbler is sometimes both striker and exploding pin.



PRINCIPAL PARTS OF A GUN-LOCK.

On the opposite page is an illustration of the principal parts of an ordinary gun-lock, as they appear when removed from the lock-plate. No. 1 is the scear-spring; 2. The scear; 3. The main-spring; 4. The hammer, or striker; 5. The swivel; 6. The bridle; 7. The tumbler; 8. The tumbler pin.

In the hammerless guns of different makers, the mechanism of the locks varies considerably: in fact scarcely two are alike. In some of them the mechanism is composed of a great many parts or pieces; in others there are even fewer pieces than in that of an ordinary gun-lock with outside hammers.

To strip a gun-lock.—To strip a gun-lock is to take it to pieces; and although such is an operation usually left to the gunsmith, there are many sportsmen who prefer to see to their gun-locks themselves; and in some instances, where no gunsmith is reasonably accessible, they have no alternative but to do so, or to allow them to rust and spoil. And although it be rarely necessary to remove the gun-locks in a well-made gun, there are occasions when it is essential that they should be looked to; at all events, once or twice in the season: and particularly if the sportsman be residing in a tropical climate, where it is indispensably necessary to pay frequent attention to the gun-locks.

In order to clean a gun-lock it is necessary to

strip or take it to pieces—an exceedingly simple process, with which every sportsman should be acquainted. The only tools requisite for the purpose are a spring-cramp and a small screw-driver.

The first thing to be done is, to cramp and remove the main-spring: to do which, raise the hammer to full cock; apply the spring-cramp, and carefully screw it up till the hammer is powerless (one or two turns of the screw will be sufficient); press the scear and let down the hammer, and the main-spring may be taken off in the claws of the spring-cramp.

The other parts of the lock, with the exception of the tumbler, may then all be taken off the lock-plate by merely turning out the screw pins; beyond which no force whatever need be used: the scear-spring should be the last piece to be taken off. To remove the hammer and tumbler, first unscrew and turn out the tumbler-pin, then insert a small wire punch in the pin-hole, and gently knock away the hammer from the lock-plate. A well-fitting hammer can only be removed in this manner without injury to the pieces.

As to cleaning and oiling the gun-locks.—It is seldom that the lock of a well-made gun requires to be taken to pieces and cleaned; but when necessary, all adhering substances should be carefully brushed off each piece. The parts should be then wiped over with soft rag or lint, and each piece

rubbed up with soft dry washleather; the cleaner being careful not to breathe upon the metal and that no dampness be left upon it.

Oil should be used very sparingly and applied with a small feather after the lock has been put together, to those parts only where there is friction, viz. the stud or pivot of the tumbler, which passes through the lock-plate; the stud of the scear, scear-spring, and the roller of the tumbler. These are the only parts requiring oil.

The cleaner should use for the gun-locks very pure refined oil such as is prepared expressly for gun-locks and other fine-working machinery.

To put the lock together again.—First screw on the scear-spring, then the scear; then put in the tumbler with the swivel attached; then the bridle and screw it to the lock-plate; after these are all in their places, put on the hammer, tapping it home to its berth at half-cock. The main-spring may then be replaced; first cramp it with the spring-cramp, then hook it on to the swivel, and slip the stud into the stud-hole; take off the cramp, and the lock will be ready for action.

In all these operations, remember that no force whatever should be used except in cramping the main-spring, and that must be done cautiously with the spring-cramp.

Disadvantages of a foul gun, with suggestions for keeping guns in order.—When a gun is foul and

dirty inside, it “kicks” much more mischievously than when clean, because of the increased friction and difficulty of forcing the charge. A gun that is damp or greasy inside, though in other respects perfectly clean, kicks violently, by reason of the moisture creating resistance.

A gun that has been carelessly put away, or long neglected, must not be expected to shoot so well or last so long as one which has received all proper and necessary attention.

The insides of the barrels should be kept as clean and lubricous as polished stone or steel; and the gun will shoot so much the better.

Guns, when not in use, should be often looked to, wiped, and re-oiled with clean fresh-oiled flannel or lint, free from all manner of dampness; and the hands should be free from moisture or perspiration during the process; in fact, if performed with gloves on, so much the better.

When a gun is laid by for any length of time, the barrels should be well greased with neatsfoot or other animal oil, or pure tallow, or half and half of each; the muzzle should be plugged with a greased cork, or two or three tight-fitting waddings well greased; or better still, a dry wooden rod covered with flannel, and fitting the barrels closely from muzzle to breech-end.

Sportsmen should see that their guns are not neglected, or they very soon become damaged; and

if long laid by in a damp or dirty state, they sometimes receive irreparable injury. It should not be forgotten that they are made of a metal which corrodes and rusts by neglect or damp; but with care and attention may be kept bright and clean as if fresh from the gunsmith's. Remember, also, that few servants can be trusted at all times: and inside rust cannot be seen. Generally speaking, after a day's shooting a gun requires cleaning.

The only tools required for taking a gun to pieces and cleaning it, are a turnscrew, and a cleaning-rod.

Use cold water first, in washing out the barrels after shooting; then finish the washing with hot water.

Wipe with tow, rag, or cloth; and as the barrels dry, bind fresh pieces of the same on the cleaning-rod, so as to fit tightly in the barrel, and then, by rapidly forcing it up and down, the suction and expulsion of air quickly dries the barrels. Wipe them thoroughly dry both inside and outside; and do it quickly, or the rust will soon appear.

If a muzzle loader, be careful to leave no particle of tow in the chamber. Serious accidents have occurred through small pieces of tow being left sticking in the chambers of muzzle-loading guns.

The accident occurs on reloading immediately after the first discharge; when, a small particle of ignited tow being left in the chamber of the gun, on tossing in the powder to reload, it instantly ignites

and explodes ; probably blowing off the sportsman's hand, or producing some such fearful result. Patent powder-flasks have long been in use, which guard, in a great measure, against the serious effects of accidents arising from such a cause. All such dangers and accidents are, however, entirely obviated in modern breech-loading guns.

Occasionally unscrew and take out the nipples of the muzzle-loader, to see that there is no rust or corrosive substance inside ; but this need not be done on every occasion of cleaning the gun. Always turn them in again with a drop of oil.

The brass-nire brush may be used now and then for removing the accumulations of "leading"—that metallic corrosion which, after much shooting adheres to the barrels, inside, just above the place where the charge lies.

But this process, it must be remembered, should only be performed when the gun is perfectly clean and dry inside. The steel brush is apt to scratch and injure the barrels, therefore the brass brush is preferable. But if the inside of the barrels be well polished with spirits of turpentine or paraffine every time the gun is cleaned, there will be no accumulation of lead, and consequently no necessity to use either brass or steel brush.

If the barrels become rusty inside through long neglect, of course they receive injury. In such an event, a piece of *very fine* emery cloth or paper

should be used for scouring them; this may be done by winding some tow round the cleaning-rod so as to fit tightly into the barrel, then roll the emery cloth round the tow; securing it with fine thread. When judiciously employed, this process, on being repeated a few times, removes all rust, and polishes and smooths the insides of the barrels to great advantage.

Use none but the finest emery that is made.

The barrels of the breech-loader may be cleaned with far greater facility than those of a muzzle-loader, owing to the absence of the solid breech, and the fact of the barrels being open at both ends. When in daily or frequent use they may be cleaned without washing by the use of tow moistened with petroleum or turpentine, which will also remove any leading with which the barrels may have become corroded by much firing. After cleaning they should be wiped dry, and then oiled. In cleaning the barrels of a breech-loader always bear in mind that the breech ends require special protection, as they are easily injured, and the essentially close fitting of the breech may soon be put out of order. Therefore, never rest the lower ends of these barrels on a stone floor or other brittle substance, and never touch them with emery powder or other brightening composition which wears away the metal. And so also with regard to the flat surface of the standing breech.

The hinge or joint and other working parts of the barrel fastenings should be kept clean and well oiled, so as to facilitate freedom of action in re-loading.

Guns that are used on salt-water, or by the seaside, require careful attention, both to the insides and outsides of the barrels, or they may very soon become injured. The barrels should be well wiped with a dry cloth immediately on returning home, and should then be rubbed inside and outside with petroleum or turpentine; after which they should be wiped dry and oiled. For punt-guns, and, in fact, any large guns that are kept in use on salt-water, raw neats-foot oil should be used for the outsides of the barrels.

BREECH-LOADING GUNS; VARIOUS FORMS OF, AND MODERN IMPROVEMENTS RELATING TO.

When this work was first published (1860), breech-loading guns were in their infancy as it were. Most of the early inventions were defective, and inferior to the percussion muzzle-loader in many respects, particularly in that most essential particular, the force with which the charge was driven, and consequently in the range of the gun, and the penetration of the shot. Great improvements have, however, since been made; and what with the central

fire and other improvements, and finally the choke-bore, breech-loaders can now be obtained which shoot quite as well in every respect as muzzle-loaders.

Improvements in the manufacture and mechanism of guns, for the use of sportsmen, have therefore advanced with the spirit and requirements of the age; and mechanical ingenuity, combined with scientific experiments have finally succeeded in producing breech-loading guns apparently as near perfection as may be; and as powerful and effective in the hands of sportsmen as muzzle-loaders of the best and most improved construction.

Indeed the improvements of late years have been so great and complete that the breech-loader is now, undoubtedly, the best, safest, most serviceable, and effective gun that can be had; besides which, the breech-loader possesses so many other advantages, that it is deservedly the favourite gun in the hands of most sportsmen of the present day.

The invention of the breech-loading system is not, by any means, of recent discovery; it was tried in various forms by several inventors soon after the introduction of fire-arms. Subsequent inventors have from time to time applied the most searching ingenuity to the subject; and though they succeeded in almost every case in producing a breech-loader, it was long before they were able to make one possessing equivalent advantages to a muzzle-loader.

Breech-loading rifles are among the most important improvements of modern times. For military purposes they are simply invaluable.

So also to the hunter who treads the wild forests and jungles of eastern countries, or the western prairies of America, where successive instantaneous loading may sometimes save him his life, or afford him double and treble sport, there is no weapon on which he can so faithfully rely as the breech-loading rifle.

Breech-loading guns are made upon various principles of construction as regards the breech, its opening, closing, and security.

There are, as already observed, various contrivances for connecting the barrels of the breech-loader with the standing breech. The most primitive of the drop-down systems, is that in which the joint is fitted so close to the break-off, that on opening the gun to reload, the barrels have to be dropped so as to hang down at nearly right angles to the action before the cartridge can be inserted; this system, although applied to a modern form of breech-loader, is nevertheless a very ancient contrivance, dating as far back as the sixteenth century. Many breech-loading arms on the same principle, called "wheel-lock arquebuses," were also made during the seventeenth century. It is now considered, by practical sportsmen, to be the weakest and most objectionable drop-down form of any that is used. In the modern arrangement of this ancient system, the barrels are

connected with the standing breech by a very broad and heavy hinge extending the whole width of the under part of the gun. The system also renders the gun heavier than that of any of the other modern forms of breech-loader. Another disadvantage of this system is, that the barrels depend mainly for support on a single top fastening, which closes over a stud on the top of the standing-breech, necessitating also a very thick and heavy upper rib; whereas one of the chief advantages in the modern breech-loader is that in which the joint of the breech action is moved further forward for the purpose of giving extra support to the barrels, with facilities for fastening them so much more securely to the breech, by means of one, two, or more under-bolts, or wedges: the strain on discharge is also thereby equalised, whilst the gun itself may be reloaded with greater facility, as a very slight drop of the muzzle, tips up the breech ends sufficiently for the purpose. This improvement upon the ancient drop-down system before mentioned, was one of Lefaucheux' earliest and greatest successes, and it has been universally adopted in the improved modern breech-loaders. Indeed, the importance attached to the advanced position of the joint, or pivot, upon which the barrels turn on opening and closing the breech, and the advantages of that system, are now so fully recognised, that a breech-loader upon the ancient "wheel-lock arquebuse" principle, is not

a gun to be recommended to the modern sportsman.

Other breech-loading guns, which are not upon the drop-down system, are those in which the barrel is opened for reloading, just in front of the breech, by turning up a thumb-piece towards the rib of the barrel, which removes the breech-block, and leaves open a recess for the cartridge, which on being inserted, is then pushed into the barrel, and the breech-block is then turned back into its place.

Another is called the side-motion breech-loader, in which the barrels are made to turn on a vertical joint-pin, and by means of a lever are moved a few inches to the right for the purpose of being loaded.

There is also the sliding-motion breech-loader, in which the barrels are made to slide forward about three inches from the breech, without dropping at the muzzle, leaving just sufficient space for inserting the cartridges.

But these and other contrivances appear to have given place to the drop-down system of Lefauchaux, with the advanced pivot, of which there are many modifications: different makers having each a breech action of their own, with a method of opening and closing the breech, and of holding or securing the barrels to the discs.

The first successful breech-loader, on what gun-makers term the modern drop-down system, was in

1836, by the Frenchman before mentioned, named Lefauchaux. The success of the invention was mainly attributable to the placing of the joint of the breech action further forward on the barrels, and securing them to the breech action by a wedge-fast fastening between the joint and the standing breech; the fastening being worked by an outside lever, which on freeing the bolt permitted the barrels to drop at the muzzle, whereby the breech-end was tipped up, just sufficiently for the purpose of receiving the cartridge on reloading.

For a long time, however, the great difficulty encountered was, the escape of gas at the joint, or opening, between the breech end of the barrels and the standing breech of the stock. Nor was this defect remedied until the invention of the metallic cartridge case, containing the charges of powder and shot, which was made to fit into the breech end of the barrels so closely, that on exploding the charge, the case, by expanding at the moment, so completely closed up the interior of the barrel at the breech, that it prevented the possibility of the escape of gas.

Further improvements quickly followed in the construction of the cartridge case, making it in fact both breech and nipple of the gun, the percussion cap being thus placed inside the barrel, and exploded on a pin or plunger being struck by the hammer. The pin cartridge case was then further improved

upon by the rim-fire and central fire systems, both which are, however, but modifications of the Lefaucheux principle.

Further improvements are those by which the barrels are more closely, firmly, and securely fastened to the stock, and breech action, by means of self-acting locking bolts, passing through solid metal blocks attached to the under part of the barrels, and by various other ingenious contrivances of strong metal receptacles for wedges and bolts, moved to and fro by powerful but neatly fitting levers, which in some of the inventions are made to work under the breech action, in others above it, and in some at the sides, and some with both upper and under fastenings. These are known by various names, as the wedge-fast, double and treble wedge-fast, lock-fast, snap and grip actions. There are also the side-lever snap action, and some others; in all of which a ready means is provided of disengaging the barrels, so that they may be opened at the breech, reloaded, and rebolted with facility and quickness.

The various modes of igniting the powder were the subject of many inventions, but the most approved are the central fire systems before referred to, whereby the cap is placed at the centre base of the charge of powder, and ignited by the exploding pin, on being struck by the hammer and driven through the standing breech into the cap.

The chief advantages of the improved central fire system are, the complete enclosure of the detonating cap; the instantaneous ignition of the charge at the very centre of its base; the entire prevention of the escape of gas at the breech and the absence of any pin-hole in the barrels through which wet can penetrate. All which are advantages of great merit, and have deservedly brought the central fire systems into almost universal favour.

The introduction of breech-loaders has in some respects tended to increase both the size and weight of sportsmen's guns. In the bygone days of the flint and the percussion muzzle-loaders, the ordinary sized guns for partridge and pheasant shooting were those of the gauges Nos. 14, 15, and 16. Guns of the No. 12 gauge were the exception, rather than the rule. But now the reverse is the case, and most sportsmen use a No. 12 gauge breech-loader, where a No. 14 or a No. 16 gauge muzzle-loader formerly sufficed.

The chief advantages possessed by the breech-loading gun over the muzzle-loader, are :—

The simplicity and quickness with which it may be charged and re-charged. And the risks incident to carelessness or negligence, in loading one barrel whilst the other is charged and capped, or at full-cock, are avoided.

The ramrod, loading-rod, powder-flask, shot-pouch, and cap-holder, are all dispensed with.

Much of the time, trouble, risk, and waste of ammunition on drawing a charge are obviated; because the cartridge may be easily and quickly withdrawn from the breech-loader. Therefore there is no occasion to fire off the gun at the close of a day's shooting; the charge may be simply drawn out of the barrel and replaced in the cartridge-belt.

A rapid succession of shots may be made; and when the birds lie well such is a great advantage.

The breech-loader may also be charged in rapid succession, in whatever position the sportsman may be; even if lying upon the ground.

The moisture, which it is said is sometimes forced down upon the powder by the wadding from the sides of the barrel of a muzzle-loader, is not disturbed in the breech-loader; but the powder, in its purest state, is deposited at the breech end of the barrels inside the cartridge case.

The barrels may be cleaned with much greater facility than those of a muzzle-loader.

In addition to these, it may also be stated that there are some other minor advantages which should not be overlooked. For some purposes of sport it is sometimes desirable, when in the field, to change the shot as quickly as possible: for instance, when snipe-shooting, it is not unusual to fall in with wild duck or teal, when, if the sportsman is enabled to mark them down, or discover them before they rise, he proceeds to extract the snipe shot, and load with

No. 5 or 6, or a cartridge. With a breech-loader the risk and trouble of drawing the charge at the muzzle are avoided; and the cartridge containing snipe shot may be withdrawn in a moment, and replaced with one containing large shot. And then, should the sportsman fail in his attempts to stalk the wild fowl, the cartridges may be changed again with the same facility; whereas under similar circumstances, a muzzle-loader would necessitate the trouble and risk of twice drawing, changing, and replacing the shot. In the hands of careless or excitable sportsmen, a breech-loader is, unquestionably, the safer gun of the two; because all the risks incident to loading and unloading are avoided. Carelessness, nervousness, haste, or inattention in loading, would scarcely incur danger with the breech-loader; whereas, in the muzzle-loader, they are the causes of many accidents.

On entering a house with a muzzle-loader, or on riding or driving along the road, it is usual to remove the *caps* from the nipples. But with the breech-loader the *whole charge* may be as quickly withdrawn, and the gun is then comparatively harmless.

On the other hand the breech-loader is, usually, somewhat heavier than a muzzle-loader of the same gauge; owing to the barrels of the former being stouter and more substantial at the breech end than those of a muzzle-loader of the same gauge; and

the additional solid metal required for the wedge-fastenings, joints, pivots, grips, levers, and bolts, also add to the weight of the gun.

The crowning feature, however, in every gun, be it breech or muzzle-loader, is the force and effect with which it throws the shot; the gun that will make the best pattern and throw the shot sharpest and strongest, and consequently killing the farthest, is, to all intents and purposes, the better gun in the hands of a good sportsman.

THE CHOKE-BORE SYSTEM.

The principle of the Choke-bore system is that in which the barrel of the gun is bored so that the interior is not a true cylinder; but is contracted at one or more parts on the inside, generally at or near the muzzle, with the object of producing greater compactness in the spread of the shot (called "Pattern"), and also greater force (termed "Penetration"), in driving the charge.

Although only recently recognised and adopted by English gunmakers, the system of choke-boring is by no means new. It is said to have originated with a Spanish gunmaker more than a century since: from which date it was commonly used by several of the old French gunmakers.

The notion of some of the latter was, that in

order to throw the shot more closely, the calibre of the barrel should be narrowed in the middle; others that it should be narrowed at the muzzle; whilst others affirmed that the calibre should be gradually contracted all along from the breech to the muzzle; and probably barrels bored upon all three systems were manufactured.

It is well known that the principle of choke-boring was appreciated and adopted by some at least of the old French gunmakers, particularly in the manufacture of large guns for shooting wild fowl on the French marshes, from huts and other places of concealment; and also in the construction of French punt-guns. Some of the latter I have occasionally met with, upwards of twenty years ago, when wild fowl shooting in France. I used to term them "bell-muzzled guns," because the barrels were opened larger at the muzzle than elsewhere, and choked or contracted on the interior; some in the middle, others at the throat, about a foot, or less, from the mouth.

It is clear however, that the old French gunmakers never thoroughly mastered the theory of choke-boring, though they very nearly succeeded in so doing. The difficulties of boring were in those days a formidable obstacle to the success of the enterprise. Choke-boring has also been claimed as an American invention. But the origin of the American claim only dates as far back as 1827;

whereas it is clear that the system had been used more than fifty years previously. American gun-makers have undoubtedly improved upon it: and one of them, Mr. Faburn, patented in America, in the year 1872, an instrument for cutting and boring choke-bore barrels, called "Faburn's recess or jug-choke borer." This was a system of double-choke boring, in which the barrel was not only choked in two places, viz., at the muzzle and middle, but the interior of the barrel was actually enlarged as well from choke to choke.

Modern English gunmakers profess to have improved upon the system of choke-boring, and to have hit upon the true principle, which is, that the seat of the choke should be at the muzzle, and nowhere else: that the extreme 2 or 3 inches of the barrel at the muzzle should be contracted so as to form the choke.

The system known amongst modern English gunmakers as the "full choke" is that in which the barrel of an ordinary sized shoulder gun is contracted at the muzzle to the extent of 30 to 40,000ths of an inch.

A "modified choke" is that in which the contraction is to the extent only of about 5000ths of an inch.

In guns of larger size the contraction must, of course, be proportionately larger.

It must be admitted that by narrowing the channel

of exit at the muzzle, the gun will throw the shot with greater force and more compactness than if it were a true cylinder : upon the same principle that, by narrowing the throat and muzzle of the play pipe of a fire engine, the water is thrown with greater force and concentration, and consequently to a longer distance.

In the hands of a thoroughly good shot, a gun with both barrels "full-choke" is very effective. But in the hands of an indifferent shot, the shooting would probably not be so good as with a gun in which both barrels were without any choke at all, as the latter spreads the shot more widely ; whilst the choke-bore concentrates the charge, and consequently requires the greater accuracy and precision in its use.

If, therefore, a full-choke should be found to contract the charge of shot too closely, the shooter should use a modified choke ; and if he be a young sportsman he will shoot better with a gun that is not choked at all.

In a choke-bore gun, the gauge is deceptive, and cannot be accurately ascertained from the muzzle-end : the contraction at the muzzle making the gun appear to be of a smaller gauge than it actually is.

HAMMERLESS GUNS.

The term "hammerless," as applied to these guns is in some respects misleading; as no shoulder gun is without a hammer or striker. In the "hammerless guns" (so called), the hammer is placed inside the lock, instead of outside.

Though of comparatively recent introduction, so far as its general application to sporting fire arms is concerned, the invention is not new. Upwards of a century since, there were hammerless guns, in which the mode of igniting the charge was by means of a spiral spring and flint, both inside the lock. For many years past, gunmakers have occasionally made hammerless guns upon the percussion system, though more as experiments and specimens of the ingenuity of their craft than as guns destined for general use. But of late years gunmakers appear to have distinctly recognised the singular value, utility, and ingenuity of the system, for they have certainly devoted special attention to the subject as one capable of more useful and extensive development. The result has proved, that their time and ingenuity have been well employed, for they have succeeded in producing what are termed "hammerless guns," upon various modern systems, and of such ingenious and greatly improved mechanism, that they bid fair to rival all others of the outside hammer construction.

The breech-loading and central fire systems have, undoubtedly, greatly facilitated improvements in the mechanical contrivances of hammerless guns. But for a long time the difficulty encountered was, that in order to make room for the special mechanism of the internal strikers, it necessitated the cutting away of a good deal of wood from the head of the gun-stock: in some instances rather more than was prudent, having regard to the principle that it is desirable to retain as much solid wood in the head of the stock as possible. This difficulty has, however, in a great measure, been overcome.

There are many different arrangements of the striker. In some it forms part of the tumbler. In the Anson & Deely system, the mechanism of the lock consists of only four parts, as the tumbler, striker, and exploding pin are all in one. In some of the systems, however, having a separate striker, the parts of the lock are formed of many pieces.

The chief recommendation of the hammerless system is, that outside hammers are dispensed with. But then the difficulty arises as to the substituted means of cocking and uncocking. Some of the hammerless guns are put at full cock by the closing of the barrels at the breech after loading: others by the opening of the barrels, and the raising of the breech ends for loading. Neither of these systems possess a means of uncocking, except by pulling the trigger and firing the charge; but as a substitute

for uncocking or putting the lock at safety, or at half-bent, they are provided with a safety bolt; in connection with which there is, somewhere on the outside of the gun, a thumb-piece, button, slide, or other contrivance for working the safety bolt; so that the strikers may be locked and rendered as safe, or even safer, than a hammer gun at half cock.

Other hammerless systems of cocking the gun are by means of a cocking lever outside the gun. In some, this lever is placed under the lock, either within or outside the trigger's guard; in others a side-lever is used, which, acting upon studs affixed to the tumblers, forces them to full cock. These guns are also fitted with safety bolts which act upon the triggers.

Other hammerless systems of cocking the gun are effected by the same lever that works the action bolts; others by a lever fitting over the triggers' guard; others by a top lever; others by a top sliding bolt working in the false breech. All these systems are provided with safety bolts, slides, or catches for locking the triggers, or bolting the hammers.

For illustration of a hammerless gun, see the engraving *supra*, page 7.

The hammerless system is not at present by any means universally popular among sportsmen. There are, in fact, many who prefer the outside

hammers, which are always under their immediate inspection, to show at a glance whether the gun be at full cock or half cock. Sportsmen who have always been accustomed to outside hammers, find a difficulty at first in getting reconciled to hammerless guns; and they dislike the crop-eared appearance of them; and miss the hammers so much that it takes time to get used to the novelty.

The object of dispensing with outside hammers is, that they are said to be the cause of frequent accidents in the field, through their catching in twigs in cover, and on getting through fences, and also by slipping from the thumb in manipulation. That accidents have occurred from each and all of these causes is not to be denied, though I believe the occasions are rare: and when they have happened, it has generally been through carelessness, excitement, or other incautious handling of the gun.

It is not, therefore, by any means clear that accidents are not just as likely to occur with hammerless guns, as with those which have outside hammers. The outside triggers are as indispensable to the one as to the other, and every experienced sportsman knows that accidents occur as frequently through twigs and tangles catching the *triggers* in passing through fence and cover, as through such obstructions catching the hammers. For my own part, I have found greater inconvenience from twigs

and tangles catching beneath the *levers* of my breech-loader, than in their catching other projections of the gun.

But withal, the hammerless system has come into fashion, if not into general use. It certainly has its merits, and in the course of time it will probably become the popular, if not the favourite, form of gun.

ON THE CHOICE AND SELECTION OF A GUN.

The pleasure and enjoyment of shooting is considerably marred by using a gun that is too heavy for the strength and comfort of the shooter.

Therefore, in choosing a gun, the first matters for consideration are its weight, and your physical capacity to carry and use it through a long day's shooting, without fatigue. This can hardly be decided by the mere handling in the gun-shop, but by your own previous experience in the field, with other guns of more or less weight.

Having decided on a particular form of breech-action, the gunmaker, if of ordinary repute, will find no difficulty in providing you with a gun which shall not exceed a certain weight. If you require a very light gun, you will have to be content with one of small gauge, or that will burn only a small charge of powder. If, however, you are able to carry and use one of $7\frac{1}{2}$ lbs. weight, you may with-

out doubt, choose a substantial 12-bore breech-loader.

A strong man can carry, without inconvenience, throughout a long day's shooting, a gun of the weight of 7 or 8 lbs.: whilst a man of ordinary strength finds one of 6 or $6\frac{1}{2}$ lbs. weight as much as he can carry (so as to use it successfully) without fatigue.

The extra weight of a gun is, or should be, found in the breech-end of the barrels, whereby a larger charge of powder may be used, and greater penetration thereby ensured.

It is clear, therefore, that the sportsman who can use with facility, and carry without fatigue, a heavy gun, has considerable advantage over others who are physically incapacitated from using any but guns of light weight.

A gun of larger calibre than is ordinarily used (as for instance a ten bore) may, truly, be more effective in the hands of some sportsmen, by reason of its carrying a heavier charge: it is, however, scarcely sportsmanlike to use such a gun for partridge or pheasant shooting; though for wild-fowl and birds of large size and thick plumage, it is the legitimate weapon.

And it is a mistake to burden oneself with a heavy gun; for when the arms become weary through carrying an extra weight, the sportsman cannot shoot well.

I am no advocate for light guns ; on the contrary, I consider it a defect rather than an improvement in the manufacture of firearms, to strive to produce a gun of the lightest weight, except it be for a person who has not, naturally, the strength and physique to carry and use, with ease and comfort, a gun of ordinary weight and proportion. By lessening the weight of the piece, the recoil is increased ; and if it could be supposed possible for a gun to be so constructed that it be no heavier than the charge or missile, as a natural result, and according to the laws of explosive force, on ignition of the powder, the missile and gun would each fly in opposite directions with equal velocity.

The weight of the gun, however, is, to some men, of vast importance in a day's shooting, especially in a hilly country ; and on that account, if for no other, many sportsmen prefer as light a gun as is consistent with safety.

As to the proper or most suitable gauge of gun for general use, say for partridge, grouse, and pheasant shooting, by far the greater majority of sportsmen at the present day use a twelve bore, that is, if they have the requisite physique to carry and use such with ease and comfort to themselves ; otherwise, a gun of smaller gauge and lighter weight should be chosen ; and many a man of slender frame will find that with a good modern

sixteen gauge gun he will be far more successful in his shooting, than with one of larger calibre. Therefore, why should he burden himself with a heavier gun, and so make a toil of his pleasure? The modern improvements in guns of the last few years have been very considerable; and recent experiences have proved to demonstration, that breech-loading guns, even of the twenty gauge, as now manufactured by some of the leading gun-makers, are far more effective than many sportsmen had supposed them to be. But this is no new discovery, for in Manton's time the twenty-two gauge was commonly used and recommended by that famous maker, as sufficiently large for the ordinary purposes of shooting game. And even at the present day, it is not very unusual to find a sportsman of slender frame and limb killing partridges right and left, in admirable style, with a breech-loading gun of sixteen or eighteen gauge.

As much execution may be done with a No. 14 as with a No. 13; the difference in the shooting being so trivial as to be almost imperceptible; but in a gun, of two sizes larger, or smaller, the extra power of the one prevails over the other.

The adoption of the breech-loader as a shoulder-gun, has undoubtedly increased, not only the weight, but the size of sporting guns. A few years since, when the double-barrelled percussion muzzle-loader was pre-eminently the favourite gun, the

usual size for ordinary use by English sportsmen was of the gauge No. 14, and its weight seldom exceeded $6\frac{1}{2}$ lbs. The barrels of a gun of that weight were 30 inches in length, fairly stout at the breech, and capable of exploding with ease and comfort to the shooter, a charge of three drachms of the strongest and best powder.

But now, the usual size of the modern double-barrelled breech-loader, which has almost entirely supplanted the muzzle-loader, is two sizes larger, being of the gauge No. 12, with 28 or 30 inch barrels, and requires a charge of powder of at least $3\frac{1}{2}$ drachms, and the gun itself is not of less weight than $7\frac{1}{2}$ lbs.

But in order to obtain the corresponding advantages, the sportsman readily submits to the extra one pound weight. If under 7 lbs. in weight, a 12-bore double-barrelled breech-loader will not burn, with comfort to the shooter, a heavier charge of powder than three drachms.

The extra weight of the breech-loader arises chiefly from the additional dead weight of solid metal in and about the mechanism of the breech-action, such as wedge fast upper and under fittings, levers, bolts, slides, and other mechanical contrivances which are indispensable to the safety of the breech-loading action, upon whatever principle it is founded.

But sportsmen have now become accustomed to

this extra weight, and willingly submit to it on account of the many advantages possessed by the breech-loading system.

In choosing a breech-loader, one of the principal points to look to is, the true fitting of the barrels at the breech end to the standing breech. The closing up should be as true and perfect as possible all round, as if indeed the two were of one piece. If on shaking the gun to and fro it gapes at the breech, even to the thousandth part of an inch, the gun is imperfect in its construction: for any gaping at the breech-opening, sends down the muzzle.

The true action of the pin, or plunger, is also a matter of importance to look to in the selection of a breech-loader, and should be carefully tested. If the plunger strikes the cap with true precision, there need be no misfires, whatever the weather in which the gun is used.

The balance of the gun is also a matter for careful consideration. If too heavy at the muzzle, it is apt to cause the sportsman to shoot below fast-flying birds. If too heavy at the butt, it cannot be brought to the shoulder with the same readiness and facility as a well-balanced gun.

The point of convergence of the barrels of a double-barrel gun is also a matter that should be looked to, though it is one that may generally be left to the gunmaker. It is advisable, however, to examine the rib and joiner of the barrels, and see that they

are close together, or nearly so, otherwise the gun will throw the shot so much to the right and left that you will fail to kill straight forward shots. This defect (though rare) arises when the rib which divides the barrels is too thick. Some gunsmiths, in their desire to obtain firm under and upper fastenings for the breech-action, get as much metal as possible between the barrels and in the grooves; with a result not always advantageous to the accuracy of the gun.

Double-barrelled guns have been found (though rarely) to shoot a little inwards: *i.e.* the right barrel drives the shot a little to the left, and the left barrel a little to the right. Any gun that is so constructed that the point of convergence is so near as to cause a gun so to shoot, at short range, is wrong in principle: for although such a gun might assist a young sportsman who is in the habit of shooting behind his birds when crossing to right or left, such would be the only shots he would kill with it. All straight away shots would be missed, because neither barrel would ever throw the shot in a straight line with the rib. It is a fault that may be readily detected on testing the gun at a pasteboard target.

The barrels of a double gun are or always should be made to taper slightly towards each other. If the barrels are extra stout they are usually flattened or reduced at the breech-end where joined; in

order that the point of convergence may meet at the proper distance, say 35 or 40 yards more or less, according to the gauge of the gun.

It is well to avoid guns that are specially constructed for throwing the shot very high; also those for throwing it low: for if once you get accustomed to a gun of a special peculiarity of the kind, you will make but a sorry hand with any other.

Amongst the great variety of hammerless guns that have recently been introduced, before making a selection it is important to thoroughly examine the mechanism of the locks; particularly as to the true and unimpeded action of the striker, the means of cocking the gun, the safety action, and other mechanical appliances; and further, to test the gun by actual and repeated trials to see that there is no penetration of gas into the lock on the explosion of the powder: for unless the locks are perfectly gas-tight, as well as air-tight, the invention itself is unsatisfactory. An escape of gas into the machinery of the gun-lock is a very bad fault, as it must of necessity be detrimental to the works, and would soon blacken and corrode them, and impede the free and easy action of the various parts, unless frequently stripped and cleaned.

Choke-bore guns are very effective at long-ranges in the hands of competent sportsmen, but they are not recommended for beginners. A man who is but an indifferent shot, and who is seldom able to kill

very-fast flying birds, particularly at long-range, may well be content with a gun that is not choked; or with one that has one barrel, a cylinder and the other a modified choke. But a skilful sportsman may use with effect a gun, both the barrels of which are full choke.

THE GUN-STOCK GAUGE.

As regards the fitting of a gun to suit the shooter; although it is always best before purchasing, to test the gun for length and bend of stock, and cast-off, by bringing it up to the shoulder, taking aim, &c., as already suggested (*supra*, p. 8); yet there are occasions when this cannot be done; as for instance when the sportsman resides at a distance from, and cannot conveniently pay a visit to, the gunmaker; or when residing in a foreign country, and requiring a gun of certain specified dimensions to be sent out to him there.

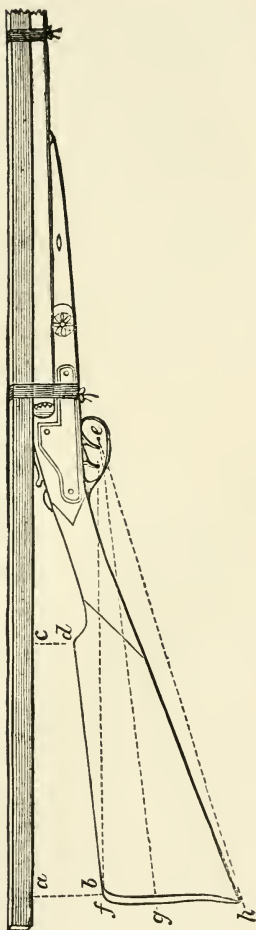
In either case he should have recourse to the simple contrivance of the stock-gauge (see engraving next page), by means whereof he will be enabled to measure himself, and send the necessary dimensions, from which any experienced gunmaker will be enabled to fit him exactly.

INSTRUCTIONS FOR SELF-MEASUREMENT FOR LENGTH AND BEND OF GUN-STOCK.

Take a shoulder gun as near your fit as you have ; and fasten tightly with small twine, a perfectly straight spline of wood, edgewise, along the groove of the rib which divides the barrels ; leaving the breech-end of the spline projecting over and just beyond the heel of the gun-stock, as shown in the annexed engraving : then lay the gun upon a table and measure with careful precision to the 8th (or even the 16th) of an inch as follows—

For bend of gun-stock ; from *a* to *b*, and from *c* to *d*.

For length of stock ; from *f* to *e*, from *g* to *e*, and from *h* to *e*, the three latter measurements being taken



from the tip of the fore-trigger to the middle of the heel-plate or half-thickness of the gun-stock.

If you require more or less cast off than the gun you measure from, add to, or deduct from, the dimensions accordingly; and so also with regard to the length of stock.

In some instances it may be advisable to state in addition, the height of the shooter. And if any peculiarities of figure, as short neck, or long neck, slender figure or very stout, they should be mentioned.

The calibre, length of barrels, weight of the gun, and other particulars, should also be stated.

AMMUNITION.

Gunpowder.—There are many different qualities and varieties of gunpowder, and of late years several new kinds have been introduced; particularly those known as wood powders, the chief advantages of which are, that after explosion there is no smoke, only a light transparent vapour, and the residuum or deposit in the barrel of the gun is very small in comparison with that of the ordinary black powders. Wood powders are of more rapid combustion than black powders; it may therefore be doubtful if they are suitable for guns of large calibre. It is calculated that two drachms (by weight) of Schultze wood powder are equal to four

drachms of black powder ; but in measure both are the same : *i. e.*, the two drachms of wood powder fill the same measure as the four drachms of black. The Schultze powder has been much improved in quality since its introduction in 1863, and it is now very much used by sportsmen in the field, and also at shooting matches. An American wood powder, known as the Dittmar, is similar in appearance to the Schultze powder, though a totally different manufacture. In loading the cartridges with wood powder it should not be rammed : all that is necessary is, merely to push the wood into the case, until it rests upon the powder, without compression.

Black gunpowders have also been greatly improved in the manufacture. Many years ago fine grained powders were the order of the day with English sportsmen, but of late years it has been found that greater force and penetration are to be obtained from the larger grained powders. The theory being that fine grained powder burns up so much more rapidly in the barrel, and expends its force too suddenly ; whilst the coarse-grained powder, through burning more steadily in the barrel, continues to expend force as it burns all the way up the barrel to the muzzle end. But whether this theory be correct or not is difficult to determine. At all events gunpowders of a larger grain than formerly are preferred by most sportsmen of the present day.

Undoubtedly, too, the shape of the grain materially affects the combustion: the sharp diamond shaped grains burning up more readily than the round-shaped ones. Much, therefore, of the quality of the powder depends on the size, shape, and density of the grains. But it is a mistake to suppose that every grain should be of the same size and shape. Some of the best gunpowders that are made are composed of grains of various sizes, and an infinite variety of shapes; though none of the grains exceed a certain size in a certain class, yet they contain many of a less size.

Every sportsman should be particular as to the choice of his gunpowder; as much of his success is due to its quality. The best is very much the strongest and purest, and does not foul the gun so quickly as the inferior.

Shot.—The best shot is made entirely of lead, is uniform in size, and perfectly spherical. Chilled shot of the best and purest manufacture is also made wholly of lead. Hard shot (so-called) can only be rendered harder than lead by the admixture of some other metal, or alloy, with the lead, which, if lighter than lead, deteriorates from the true quality and value of the shot. Hardened bullets for large rifles may be an improvement for some purposes, but shot of whatever size intended for killing the feathered tribe, should be made entirely of pure lead. It is erroneous to suppose that shot

made of a lighter metal than lead will kill either further, cleaner, or more surely; the effect being the very reverse. And it cannot be too generally made known that there is always the risk of breaking one's teeth in eating game that has been killed with hardened shot.

Small shot is known in the manufacturing trade as Drop shot. The process of manufacture is by pouring molten lead into sieves of different sized meshes, through which it is dropped down a tower or shaft into cold water, the height of the fall being regulated according to the size of the shot. In this manner drop shot is made in sizes varying from about 3000 pellets to the oz., to the largest size of only about thirty to the oz., the latter requiring a very long drop in order to cool and become firm before reaching the water.

Shot of a larger size than drop shot are termed mould shot, or machine shot; being made by another process, either in moulds or by machinery.

The standard sizes of small shot are known by a figure or No.: the larger sizes by a letter. There is not always, however, a perfect uniformity in the precise number of pellets to the oz. in the shot produced by different makers. The following are the average number of pellets to the oz.

STANDARD SIZES OF SHOT.

Distinguishing No. and Letter.	Pellets to the oz. (English.)	Pellets to the oz. Newcastle chilled shot.	Pellets to the oz. Tatham Brothers. (American.)
No. 1	82	104	71
„ 2	115	122	86
„ 3	135	140	106
„ 4	177	172	132
„ 5	220	218	168
„ 6	282	270	218
„ 7	340	340	291
„ 8	462	450	399
„ 9	568	580	568
„ 10	985	850	848
„ 11	1120	1040	1346
„ 12	1350	1250	1825
Dust	1672	{ 1700 }	2326
		{ 2800 }	
L. G.	5½
M. G.	9
S. G.	11	8	...
S. S. G.	15	11	...
S. S. S. G.	17	14	...
A. A. A. A. ...	30	25	...
A. A. A.	38	40	...
A. A.	40	48	...
A.	45	56	...
B. B. B.	50	64	42
B. B.	58	76	50
B.	75	88	59

It should be observed that the subjoined list gives the average number of pellets to the oz., but, as there are many manufacturers of shot, both size and number of pellets slightly varies in the different manufactures, and most of the American productions are nearly a size larger than those of the English.

It will invariably be found on the trial of a gun at the straw board targets, that it shoots best with shot of those sizes which fit most compactly in perfect layers in the cylinder of the cartridge and barrels of the gun; and when large shot is used this compactness of the layers is a *sine quâ non*.

Cartridges.—Good and successful shooting with the breech-loader depends, in a great measure, on the care and attention with which the cartridges are made. But as to this, enterprising men have shown themselves fully alive to the importance attached to these essentials, and the manufacture of cartridge cases or shells by machinery has become a highly lucrative commercial undertaking; whilst that of filling them with carefully weighed charges of powder and shot is another.

Exquisitely made shells may, therefore, now be obtained to suit guns of every gauge; whilst ready-filled shells may also be had charged with shot of any size and weight that may be required. And experience shows, that in every stage of their manufacture the greatest care and ability are used; and, knowing this, sportsmen buy and use, with every confidence, ready-filled cartridges. The discharged shells may be, and are, constantly re-filled and used again and again, the metallic ones many times over, and even some of the paper ones two or three times, which proves the care and attention displayed in their manufacture.

If you desire to fill the shells yourself, the gun-maker, of whom you purchase the gun, will show you how to fill them, and provide you with a mould and other suitable tools and materials for so doing. With a little practice, the art of filling them may be soon acquired. Many sportsmen prefer to fill their own cartridge cases, not only for the sake of economy, but because they feel they can place greater reliance on their own precise measure of powder and shot; a very essential particular as regards successful shooting, and especially so in pigeon shooting matches. But, as already observed, every reliance may now be placed on the manufacturer, and although formerly, many sportsmen were in the habit of buying the shells and filling them themselves, or of having them done under their own immediate inspection; at the present day, most sportsmen obtain them ready filled.

Gun Wads (or Wadding).—It is essential in loading the gun, or filling the cartridge cases, that the powder be separated from the shot by good substantial close fitting wads.

Felt wads are extensively used for this purpose: also the pink-edged wads, which are made from a mixture of felt and paper; cardboard wads and black-card wads are also used in conjunction with felt wads.

It is always advisable to place a grease-proof or hard pink-edged wad, or else a thick black-card wad,

next the powder, and over that a thick felt wad. The wads used should be slightly larger than the bore of the gun, or of the cartridge case, so as to ensure tight fitting, and to prevent the gases, on explosion of the charge, from mixing with the shot. But they should never be so large as to bulge the cases.

A single cardboard wad, over the shot, is all that is required, if it be of sufficient substance to keep the shot from becoming loose in the one barrel on the explosion of the charge in the other.

CHARGING OR LOADING THE GUN.

The proper charging, or loading the gun with its most effective charge, is a matter too often disregarded or treated with indifference. It is, however, an important element, tending materially to success in the art of good shooting; and simple as the process may appear to some persons, there are many sportsmen who do not do their guns justice, because ignorant of their best capabilities. They will not take the trouble to try their guns sufficiently, if at all, at the straw board sheets; but prefer to rely on what the gunmaker states to be the proper charge, and which is not always either the best or the most effective.

An intelligent sportsman by testing the gun him-

self, soon discovers by practical means, the best pattern and most penetrating charge it is capable of making and driving at measured ranges.

There can be no doubt but that the sportsman may acquire a better knowledge of the power and range of his gun, with that of the most effective mode of charging it, by a few hours' practice at pasteboard or straw board targets, than by many months' shooting at the feathered tribe in open country.

The proper quantum of powder for a charge varies according to the gun: some guns require more, some less, though of the same size and gauge.

The only satisfactory mode of ascertaining the best and most killing charge of powder for any particular gun, is by firing with carefully weighed charges or cartridges at the pasteboard or straw board sheets before mentioned.

Although a heavy charge of powder, and a relatively small charge of shot, may suit some guns; in others it only produces a heavier recoil and discomfort to the shooter, without any corresponding advantages.

It is unwise to charge the gun with more powder than it is capable of burning with good effect. The folly of so doing is made obvious by any portion of the charge being blown out of the barrel unconsumed.

This may be proved by spreading large sheets

of white paper on the ground, extending to the distance of 12 or 14 yards from the muzzle of the gun, and then firing the gun over them on a calm day: when, if there are any unburnt grains of the charge, they will fall upon the paper, and so the error will be immediately detected.

Much diversity of opinion exists as to the sizes of shot best adapted for the different species of game, but in these things, practice is the best instructor. The sportsman ought always to be able to decide for himself, taking into consideration the time of year, and the size of the bird he goes in quest of: bearing in mind that the common error is that of using shot that is too large.

It is a mistake to use mixed shot, or those of various sizes mixed together; a charge of mixed shot is not so effective as one in which they are all of a size.

An overcharge of shot in a small barrel rests too high in the cylinder; and being heavier than is strictly in accordance with the rules of gun-loading, the powder has not sufficient power to drive it with that force which is requisite, and which constitutes the most important element in strong and effective shooting.

Many birds are missed at long distances (though the aim be perfectly correct) through disproportionate and injudicious loading. The fault generally consists in that of using too much shot or too

little powder; or, it may be, the size of the shot is too large for the object.

Old sportsmen generally use more powder and less shot than young ones: the latter are usually so afraid they should not have shot enough in the gun to kill the object: and they sometimes erroneously fancy, when they miss, that the shot used is of too small a size.

It is seldom that the error lies in an overcharge of powder: the gun should, as a rule, be charged with as much powder as it can comfortably explode. The error commonly lies in an overcharge of shot, which not only scatters considerably, but strikes feebly, in addition to causing the gun to kick with considerable violence.

The smaller the shot, the closer they lie in the cylinder; and though large shot kills further than small, if it hits, it is not desirable to use large shot except for large objects, because of the greater spread and the smaller number of pellets.

For instance, the chances are six to one against killing a small bird as a sparrow, either sitting or flying, at thirty or forty yards, with No. 4 shot, fired from a 14 or 16 gauge gun; whereas, with the same gun, at the same distance, a sparrow may be killed with certainty, either sitting or flying, with No. 12 shot.

These experiments, simple as they may appear, and easily as they may be tested, are nevertheless,

frequently, either disregarded through ignorance, or disbelieved by inexperienced young sportsmen, through a want of careful consideration: the consequence is, that oftentimes when their aim has been perfectly right, and they might have killed had they used shot of a proper size, the bird has flown away uninjured, having entirely escaped, though the charge flew all around it; but the shot being so large and few, not one happened to strike, or at all events not in a vital part.

It should be remembered, that on the instant of force being applied to the charge of shot, through the ignition of the powder, it is the undermost shot which propel the uppermost; and, all being solid globular particles, the force is not exactly central upon each shot, as it might be if they were in the shape of short pieces of tobacco-pipe placed one behind the other in regular layers; but the shot being perfectly round, a great many must necessarily receive their propellant power at the sides and otherwise than central; and so the flight of a few only of the shot go direct to the centre of the mark.

To illustrate this proposition, let a man load a rifle with two bullets, both of which are much smaller in diameter than the gauge of the rifle; let the bullets lie one on the top of the other in the barrel, a wadding being placed over them to prevent their rolling out on taking aim. With a rifle so loaded, let any one, however experienced in the use of the

rifle, fire at a three-foot target at sixty or a hundred yards, and the chances are very many against either bullet striking it. The reason is clear:—the pressure or force of the gunpowder, acting on the undermost bullet, presses the upper one out of its straight course, so that immediately on leaving the barrel the uppermost bullet is forced aside, or out of its true trajectory course, and at fifty or sixty yards the two bullets are probably two, three, six, or more yards apart.

The same principle applies to large shot in a small barrel; though, of course, as the size of the shot is diminished, so the deviation from the true line is decreased.

Sportsmen who wish to pursue and look more strictly into this theory should procure a few inches of small glass tube, of the same interior size as the barrels of their guns; plug one end of the tube, and put in a charge of large shot. It will then be seen how they lie, one above the other, in the gun; the vacua between them being many and large so that the pressure upon each shot cannot be central; therefore, on being forced out of the gun, there must be a tendency to diverge. If then he takes another tube, and introduces a charge of small shot, he will see that those lie more evenly and compactly; and, consequently, on being forced out of the barrel, the divergency must be very much less.

Therefore, as regards shot, be particular not to use too heavy a charge, nor shot of too large a size. For an ordinary shoulder gun for grouse and partridge shooting, from an oz. to an oz. and a half of shot is generally ample, whatever the charge of powder.

Sizes of shot for various kinds of game, &c.—The following are the proper sizes of shot whether used as loose charges for muzzle-loading guns, or for filling the cartridge shells of breech-loaders.

For partridge shooting during the first fortnight in September, use No. 8 shot; then No. 7 to the middle of October; and afterwards No. 6 to the end of the season.

For pheasant shooting, No. 7 in October; No. 6 during the rest of the season.

For grouse, No. 8 the first fortnight; then No. 7; and, when very wild, No. 6.

For black game, No. 8 at first; No. 6 in October; and then No. 5 to the end of the season. If a larger gun than common be used, shot a size larger will be required, and with so much the better effect when black game are very wild.

For woodcock, use Nos. 8 or 9.

For snipes, No. 10 is best; but larger than No. 8 should never be used.

For shooting wild-ducks with a large shoulder gun, use Nos. 6, 5, or 4, according to the size of the gun.

A twelve-gauge breech-loader, which is the most usual size for partridge and general shooting at the present day, should be charged liberally with powder, according to the strength and quality of the barrels; but $1\frac{1}{4}$ oz. of shot is the very utmost that should be used in a single charge; from 1 oz. to $1\frac{1}{8}$ will generally be found the most effective charge; and the highest average execution will be done at partridge shooting with No. 7 shot.

For a gun of No. 16 gauge use a liberal charge of powder, and 1 oz. of shot at the most; if one-eighth less than an ounce, probably the gun will throw it stronger. No. 8 is the most killing sized shot for a gun of this calibre.

PATTERN AND PENETRATION.

Every sportsman who desires to improve his shooting, should take pains to become better acquainted with the capabilities of his gun, by testing the latter at various measured ranges, with different charges of powder and shot, and also with shot of various sizes.

The usual mode of testing the pattern and penetration of an ordinary sized shoulder gun is with what are known as "straw-board" sheets; from twenty to thirty of which should be placed each one behind the other, in a frame or rack made for the

purpose, so that each sheet stands separately without touching the others, a 30-inch circle with a 10-inch centre being stamped or inscribed upon each. The object of the sheets standing in the rack without touching each other is, that the test of penetration may be the more readily proved, as the shot punches holes completely through the sheets when so placed, instead of making mere indentations, the result of placing them close together. The front rim or frame work of the rack should be faced with iron, to protect the wood work of the frame from injury by the shot.

By "pattern" is meant the distribution of the shot upon the 30-inch circle when fired from the gun; the best pattern being that which shows the most regular, even, and compact distribution of the charge within that space. If the pattern shows that the shot is delivered in patches, leaving wide blanks here and there on the straw-board, it is a very bad pattern, indicating something wrong either in the range at which the gun is practised, the proportion of shot to the powder, or *vice versa*, or in the gun itself. Many a bird would escape, however true the aim, from a gun which makes a bad pattern. But before condemning the gun, the shooter should test it again and again, varying the size of the shot as well as the bulk; and also with more or less powder, and at longer as well as closer ranges, until he satisfactorily discovers the charge

and range by and at which it makes the most satisfactory pattern ; he can then order his cartridges accordingly.

Notes should be made in writing at each discharge as to the measure of powder and weight of shot, together with the range, and other particulars.

Experiments of the kind, judiciously made and carefully noted, will be found to be of great value and assistance to the sportsman, in making him acquainted with the most powerful qualities of his gun, together with its most effective charge and range, and in some instances of opening his eyes to some glaring errors and defects in his shooting, which for the future he will be careful to avoid ; such for instance, that his gun will kill farther than he supposed it would, that it shoots best with less shot and more powder, that he has hitherto been shooting with shot several sizes too large, perhaps out of range, above his birds or below them, and errors of a similar kind. The experiment is therefore well worth the time and trouble it takes, which will, too, be amply repaid in the shape of many an extra brace of birds, and with a greater confidence in the use of his gun, and general improvement in his shooting.

Young sportsmen may be assured that, on testing and proving their guns in this manner they will gather valuable experience, and learn from the best sources the real power and capacity of the weapon, in the use of which they desire to excel.

As a guide to the kind of pattern and penetration which really good guns are capable of making upon the 30-inch circle of the straw-board sheets, I append the following average results of carefully made experiments with three high-class guns of the respective gauges of Nos. 16, 14, and 12; the best and strongest black powder being used throughout.

GAUGE, NO. 16. RANGE, 40 YARDS.

Charge of Powder.	Charge of Shot.	Size of Shot.	Pattern.	Penetration.
3 drachms	1 oz.	No. 8	295	15 sheets
"	"	" 7	250	18 "
"	"	" 6	210	22 "
"	"	" 5	160	26 "

GAUGE, NO. 14. RANGE, 40 YARDS.

Charge of Powder.	Charge of Shot.	Size of Shot.	Pattern.	Penetration.
3 $\frac{1}{4}$ drachms	1 oz.	No. 8	300	18 sheets
"	"	" 7	260	20 "
"	"	" 6	210	23 "
"	"	" 5	170	26 "

GAUGE, NO. 12. RANGE, 40 YARDS.

Charge of Powder.	Charge of Shot.	Size of Shot.	Pattern.	Penetration.
3 $\frac{1}{2}$ drachms	1 $\frac{1}{8}$ ozs.	No. 8	320	18 sheets
"	"	" 7	280	20 "
"	"	" 6	220	22 "
"	"	" 5	180	25 "
"	"	" 4	140	27 "

Guns with extra stout barrels and of extra weight, are capable of burning four drachms or more of powder, whereby still greater penetration may be obtained. Such guns are sometimes used at pigeon-shooting matches, but are too heavy for ordinary use by sportsmen in the field.

It will be seen that as the size of the shot is increased, the deeper is the penetration. But it should also be observed that the deeper penetration is only obtained at the cost of a wider pattern; thereby rendering the success of the shooter the more uncertain, as the bird has a better chance of escape.

Undoubtedly large shot kills cleaner and at longer range than small shot; but, with true mark, you will kill more frequently with fair-sized shot than with large.

RUDIMENTARY LESSONS.

“Enough ! permit me now to sing
The art of killing birds on wing.”—WATT.

Initiatory Practice.—The young sportsman, having selected a gun of suitable gauge and weight, and taken care that the length and bend of the stock are in fair proportion, having regard to his figure and length of arm, as already suggested (*supra* p. 46); he should first of all endeavour to acquire, under the guidance and advice of an experienced sportsman, a safe, easy, and comfortable habit of handling and carrying the gun. He should also make himself familiar with the action of its locks, and generally with its safe and ready manipulation. He should accustom himself to a prompt and easy mode of bringing the gun up to his shoulder, taking quick and ready aim at small moving objects, flying and running, fast and slow. When he has had several lessons in these, he may load the gun with small charges of powder, but no shot; and after firing away some two or three dozen charges, in the course of a week or so

he should commence by shooting larks in the fields, walking them up and shooting them as they fly, using very small shot (No. 12), and loading with small charges.

He should never shoot at birds unless they are on the wing, nor at anything unless it be flying or running. Though he will seldom kill at first, he must not be disheartened, but persevere until he succeeds, which he will assuredly do in time. Let him take courage that it is simply a question of time, as he will find after a few weeks' practice.

Shooting sparrows from a trap is also very good initiatory practice; and if a very small portion of the tips of the feathers in each wing be clipped off with a pair of scissors, or if the tips of their tails be cut off in the same manner, it will make them fly so steadily, and so much like young partridges, that it will be as good practice as he can make before the shooting season commences. Another mode of making sparrows fly steadily is by slipping a small paper collar round their necks: this may be done by simply cutting a hole in the centre of a circular piece of paper from two to three inches in diameter; when, by slipping their heads through the hole, the paper forms a collar, which impedes their flight considerably.

On presenting and taking aim, always remember that the hand which touches the trigger must obey the eye: not the eye the hand.

Put your left hand forward in advance of the guard, to grasp and prop the barrel, and assist in holding the gun steadily, as in the engraving "Bang! Bang!" which faces the title page of this work.

A young sportsman will find this the preferable and most reliable mode of holding the gun, as it keeps up and prevents any drooping of the muzzle; a bad fault in a young sportsman, causing him to shoot too low; consequently, his strong shot, if they hit the bird at all, strike the legs only, whilst its body remains uninjured.

A gun so held is, too, much lighter in the hands, being fairly and comfortably balanced, and may be kept firmly to the shoulder. If the young sportsman has acquired the bad habit of holding his gun in a cramped and unsteady manner, the sooner he desists from it the better.

Light guns may be held firmly, by placing the left hand in front of the trigger-guard. A strong man can hold a tolerably heavy gun in that manner; but it is not by any means a proper mode of holding the gun. The left hand should be put forward in *advance* of the guard as already explained, and such is the safer and better position.

With regard to pulling, or drawing the trigger; as with the rifle, so with the gun; the endeavour should be to discharge the piece with the least possible motion of the hand. The finger alone

should act upon the trigger, obeying to the instant the eye and the aim.

A young sportsman may derive considerable advantage by going out frequently with a good, steady old sportsman, and observing the neat and masterly way in which he uses his gun, and brings down his birds; and he may learn, besides, more in a week, from such a man, of the art of finding and approaching game, than he would in a year, in the company of a bad shot.

Young sportsmen must not be vexed or disheartened at missing difficult, or even fair shots. Generally speaking, the reason why they miss is because they shoot both behind and below the bird; the result of the trigger-finger not being quick enough in obeying the eye.

When you miss, always endeavour to ascertain the cause; and, having discovered it, resolutely determine to profit by the experience gained; and if you stick to such resolution, sooner or later you will probably become a Dead Shot.

Slow, straight-flying birds at which to practise and improve the hand in shooting, are Blackbirds and Thrushes. These birds frequent high-grown hedges. Two young sportsmen should go in company in the autumn and winter seasons and double the hedge-rows; when, with very little beating, the birds will steal out and fly in straight line with the fence, offering fair and easy shots. If not killed

they will dart into the fence again some 50 or 200 yards farther on. Use No. 10 shot for this sport. Larks, as already mentioned, are excellent initiatory practice in open field: they lie so well that the young sportsman may always be sure of getting within range: they usually rise within 20 yards; often within 5 or 10. There is therefore plenty of time for composure and deliberation. They are, too, soaring birds, of slow and hovering flight, offering the fairest chances for rudimentary practice in the art of shooting flying objects.

Be careful not to shoot at them too soon. Wait until they are at a fair range; from 30 to 40 yards: and when you kill, measure the distance; and profit by the experience you gain by so doing. Use No. 12 shot for Larks and Sparrows.

In beating for game, young sportsmen should always prefer old dogs to young ones; and the less they talk to them, the better they will hunt.

Don't "fluster" on going up to a dog at his point; if you do, you must not expect to kill.

When the dog points at game, never run, but walk leisurely up, taking quiet, but firm steps; you will then have a better command of your nerves, and a calmer discretion as to range and the flight of the bird when it rises, than you would have if loping along with hasty strides.

Never condescend to trespass or poach, nor to

poke your gun through a hedge, nor to shoot birds on the ground.

Never pick up a shot bird, nor allow your dogs or attendant to do so, until you have reloaded; an operation which with the modern breech-loader occupies but a few seconds. And when in company with another sportsman, if he fires and kills a bird, halt immediately, and do not advance a step until he has reloaded.

Two sportsmen shooting in company should each, in general, fire only at those birds the heads of which are pointed to that side of the beat on which he walks; at birds going straight away, each sportsman should take the best outside shot on his particular side.

Single birds, on getting up fairly in front of both sportsmen, should be taken alternately. But when a single bird rises in front of any individual sportsman, apart from his companion, the shot belongs exclusively to him on whose side the bird rose.

The necessity of observing strict silence when beating for partridges or grouse, cannot be too strictly impressed upon the minds of young sportsmen. The human voice, whether addressed to your companion or your dog, is sure to alarm the birds, if near enough to hear it.

Sportsmen should not forget that birds have ears as well as eyes: that they are very acute at hearing, vigilant and sharp sighted.

The advantages of keeping silent when in search of game are readily appreciable by those who practise it : even the natural sagacity of the dog teaches the animal to know and observe it in the field.

One of the earliest and most common faults in young sportsmen, is that of shooting *below* the flying objects of their aim. They will not keep up the muzzle end of the gun sufficiently at the moment of firing. Unable of themselves to detect the fault or to account for the cause of their missing fair shots, they usually remain in ignorance as to the reason of their failure, until the error is pointed out and made manifest to them ; and so they continue to shoot badly, perhaps for many years, puzzling their heads and vexing themselves the while : blaming their guns, their cartridges, and what not ; and giving every reason but the right one : forgetting the simple fact that terrestrial gravitation is always acting upon the shot (however swiftly driven) in its trajectory course through the air, and drawing it gradually nearer to the ground : consequently, with level aim, the body of the charge strikes below the horizontal line, and so the bird is missed.

Good shooting is sure to follow, if the young sportsman will only keep the muzzle of his gun well up, and aim in advance of flying cross-shots, and above straight-forward ones. There is seldom any fear of young sportsmen shooting too high or too far

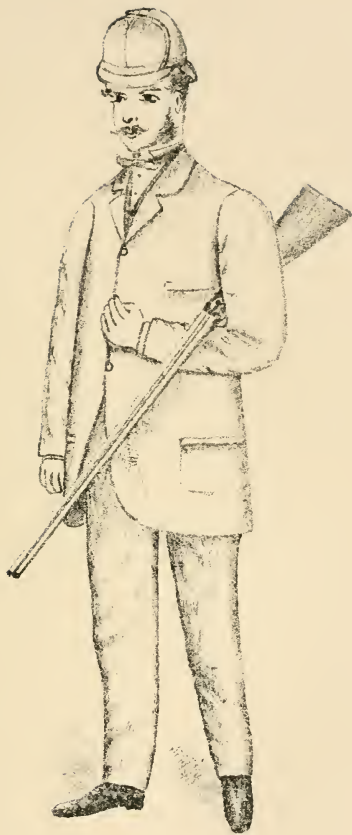
in front; their aim is always too low and too point-blank in their early practice; and, as usual with bad habits, it is difficult to break them of it.

The most unskilful of those who use the gun, sometimes, *by chance*, knock down a bird; but such men rarely kill one in sportsmanlike style, so that it lies and dies where it falls.

To fire at a bird when too near, and so to mangle and break every bone in the skin, is alike unskilful and unsportsmanlike; as it is also to hit a bird merely in the legs or the rump, or otherwise to slightly wound. In each or either of the latter cases a bird so struck is seldom or never recovered: it gets away, and either dies a lingering death, or falls a prey to stoat, weasel, or polecat. Such shooting is therefore as cruel and unfair as it is unskilful.

Young sportsmen should be careful to carry the gun at all times in a safe position, particularly when walking or taking the field with another sportsman. I know nothing more detrimental to good shooting than to find the muzzle of your friend's double-barrel constantly staring at you whenever you are walking on a level with him, or happen to turn your head to look after him. Many sportsmen, on noticing a carelessness of the sort, would leave the field and refuse to shoot in company with a man who carried his gun so that the muzzle was always pointing dangerously towards them.

In cocking or uncocking your gun, always keep the



IN THE FIELD.

muzzle pointing in the air above the level of human heads.

On getting over a fence never lay hold of the gun near the muzzle, nor drag it after you, but grasp it with the left hand round the barrels, just above the breech; holding it with the muzzle pointing upwards above your head; and taking care to have the right hand at liberty to catch hold of a bough or stake to assist you in climbing the fence.

Never use your gun for beating the bushes. A man who beats the bushes with his loaded gun may well be termed a reckless sportsman and dangerous companion, if not a downright idiot.

The young sportsman's expectations on entering upon a day's sport, should be moderate; never too sanguine; and then, if ill-success attend him, he will be the better able to bear the disappointment, which otherwise may so discompose his nerves as to cause him to miss his shots at the latter part of the day.

Above all things, guard against a feeling of envy at the better success of your companion.

Four or more sportsmen in a party are too many for sport; they should divide into couples, and go on separate beats, by which arrangement more game will be bagged and less danger incurred to themselves.

On taking the field, young sportsmen should be calm, quiet, and collected in their nerves and

demeanour, ready and deliberate in their aim, and quick and judicious in their judgment of distance and range. The sporting poet says,—

“ Full forty yards permit the bird to go,
The spreading gun will surer mischief sow ;
But when too near the flying object is,
You certainly will mangle it or miss ;
And if too far, you may so slightly wound,
To kill the bird, and yet not bring to ground.”

It is a great mistake, particularly in the early part of the season, to fire at random ranges ; by so doing you only wound the birds you shoot at, and disturb others which would in all probability have afforded you excellent sport. A sportsman who is not avaricious will get shooting enough without the doubtful chances ; and he who would wish to keep his manor as quiet as may be, and have his fields free from wounded birds, will spare and choose his shots.

When a covey of partridges or a brood of grouse rise at your feet, do not put the gun to your shoulder immediately, and so keep aiming until they are forty yards off ; a protracted aim is the cause of many a miss : rather look at the birds an instant, select one as your mark, and then deliberately level the gun and down with it ; then instantly choose another for the other barrel ; and being equally steady and accurate, you will drop that also.

But remember, that, in order to bag your game,

you must either hit it in a vital part or break a wing; and then it is either your own fault or your dog's if it is not brought to bag.

Sportsmen should accustom themselves to shoot alternately with right and left barrels. It is not advisable to shoot nearly always with the same barrel.

Wiping the eye.—This is a common slang term among sportsmen. It occurs when two sportsmen are shooting in company, and one of them fires at a bird and misses it, and the other then, immediately, fires at the same bird and kills it, the latter is said to have “wiped the eye” of the other.

ERRORS OF YOUNG SPORTSMEN, AND CAUSES OF MISSING.

There are many fairly successful sportsmen who sometimes kill, though they often miss; but few of whom are able to explain the causes of missing; and therefore can never feel certain of hitting a flying bird at any distance within range, and in any line of flight; consequently can never rank as “Dead Shots.” Sometimes the cause of missing appears strange and puzzling; but, if carefully inquired into, it may usually be found to arise from a very simple reason, though the sportsman himself may be unable to give a satisfactory explanation, and not infrequently

attributes it to the reverse of what it actually is. It is the purpose of the author, therefore, to endeavour to point out some of the principal causes of sportsmen missing the flying objects of their aim.

And first, it should be observed, that a very great deal of the evil lies in the unequal length, bend, and form of the gun-stock. Much more depends on these than many sportsmen imagine: indeed, more bad shooting arises from a disproportionately mounted gun than from any other cause. In order to shoot well, the young sportsman must have a gun that is so stocked and mounted as to fit him. Some gun dealers do not pay sufficient attention to this important essential; but, disregarding the build of their customers, tall and short, fat and thin, long-necked and short-necked individuals, one and all are supplied with the same, or indifferent lengths and bends of gun-stocks. This, then, is a mistake of much more importance to the young sportsman than many would suppose. Shoulder guns for use in the field, should have stocks of a length and bend to suit, as exactly as may be, the neck and arms of the sportsmen for whose use they are intended.

If the stock of a gun is too short, it is difficult to get it to the shoulder in correct position; and it is still more difficult to hold it firmly and steadily to the shoulder, so as to shoot accurately at a quickly moving object.

And if too long, the difficulty of getting it up in-

stantly into exact position is increased; and it is then very troublesome to take a faithful aim, the arms being of necessity too far extended to be in an easy position: and the neck has to be stretched painfully, to bring the eye in line with the barrel.

A change of guns from day to day, from a stiff or hard-pulling trigger to an easy-going one, may cause the best shot to miss, unless he can constantly remember whether he has the stiff-going lock or the easy one. The stock of one gun may be longer or more bent than the other, or the barrels heavier; these, and such like, though apparently trifling circumstances, are sufficient to be the cause of missing, in a man accustomed to a favourite or particular sort of gun which exactly suits him.

So, too, missing fair shots does not so frequently arise from an imperfect knowledge of the use of the gun, as from other causes; such for instance as nervousness and want of confidence.

It is undoubtedly the want of calmness and control over the nerves and demeanour that is the cause of many persons never becoming good shots: a failing which increases rather than diminishes in some persons, particularly in those who shoot where game is wild and scarce. The startling suddenness with which the bird springs from the heather, or the stubble, so alarms and discomposes the nerves of such men, that they are almost sure to miss, how-

ever deliberate their aim. The best remedy for such a failing is, constant practice where game is abundant, using every endeavour to brace the nerves, and acquire a feeling of indifference as to whether you kill or not.

One of the most general errors in young sportsmen, and one which is very difficult to detect, is that of the trigger-finger not being prompt enough in obeying the eye and the aim. The intuitive action of the eye and the trigger-finger is imperative, or the shooting can never be reliable.

As in the game of cricket, a nervous and over anxious player is soon bowled out, whilst the more cool and calculating one can guard his wicket and hit with precision, because of the intuitive action of the eye and hand; which, if wanting, will soon reveal itself in the fall of a wicket.

One of the commonest errors of young sportsmen is the use of shot that are too large: they forget how few of the central or strong pellets are driven within the circle of the vital parts of the bird. To convince himself of his error, let him fire at a paper target at a range of 40 yards with a charge of No. 5 shot, and then put a plucked bird (say a grouse, or a partridge) over the central shots and see how few (if any) would have hit anything but the feathers; and that, therefore, the bird would probably have escaped unhurt. Then let him fire at another target, at the same distance, with No. 7 or 8

shot, and he will see that, with good aim, the bird would have had no chance of escape.

Another common error is the use of too heavy a charge of shot in proportion to the powder, whereas the gun should be charged with as liberal a *quantum* of powder as it will burn ; not so, however, as to shot : my motto is, " liberal of powder, but sparing of shot ; " harder penetration is thereby ensured.

Another very bad habit in some young sportsmen, is that of stooping the head and shoulders, instead of keeping upright on presenting the gun and firing. It is a bad fault, which arises from eagerness or nervousness and discomposure, through the suddenness with which the bird rises, or the rabbit pops out of the hedge.

A few years ago, when shooting in the company of a friend, not by any means a good shot, who had acquired the bad habit of stooping and leaning forward when he fired his gun ; a rabbit popped out of the ditch, close at his feet, when he so bent his body in taking aim, that it was impossible for him to shoot with any chance of success : he fired both barrels at the rabbit, but it ran away unharmed, though offering as good and fair a chance as any sportsman could desire. I was standing on higher ground at a short distance from him, and looked on with some amusement at the attitude of my friend, and ventured to tell him why, in my opinion, he missed ; putting myself in similar attitude, in order

to show him the ludicrous position in which he stood when he fired. He laughed heartily, admitted the truth of it, and said he had before detected himself in that position ; that it was the suddenness with which the rabbit had popped out of the hedge that threw him off his guard. The incident was, however, the means of breaking him of the habit. He has often mentioned it ; and although I have been out with him frequently since, I never afterwards saw him stoop when presenting his gun and firing.

The young sportsman should, in his earliest lessons, acquire the habit of standing firm and upright, in an easy and natural position, when presenting the gun and firing. Neither the suddenness with which the objects of his pursuit present themselves, nor any eagerness to kill, must be allowed to detract his attention from the primary lesson as to a staunch, upright, and easy attitude on presenting the gun to fire.

On firing too soon.—Sportsmen should be careful not to shoot too soon at birds which are flushed within fifteen or twenty yards. More birds are missed by young sportsmen at short than at long range, through the fault of firing too soon.

Occasionally measure, or step, the distance, on the ground between the spot where you stood, and that where the bird was when you fired, and you will often be surprised to find how close you were ; and when so found, take pains to correct the fault in

future, by being in less haste to shoot at birds which get up so near. The fault is one that is sometimes very deeply rooted ; in which case it will require a strong and abiding resolution to correct it from time to time.

Reflection should convince, that the extra distance gives the shot greater spread ; and therefore, if driven with sufficient force, there is the less chance of escape for the bird.

On shooting under the birds.—Young sportsmen miss more birds by shooting under them than by any other error : they *will not* shoot high enough.

By aiming point-blank at the object, the shot must, as a natural result, strike below it. In proof of this, let a sportsman aim point-blank at a fixed object, forty yards off ; and unless the gun has an elevated rib, the shot will be found to have struck below the aim ; and if this be so at a fixed object, the shot must of necessity go very much farther beneath a rising or flying one. And when it is taken into consideration that all birds of game generally continue rising (except when flushed on a hill) whilst within reach of the sportsman's gun, this may be stated as one of the principal and almost invariable reasons why young sportsmen so frequently miss.

Pheasants, for instance, gain fifteen or eighteen inches in altitude between the time of pulling trigger and that of the shot reaching forty yards ; and par-

tridges often quite as much ; therefore the centre of the charge is too frequently thrown under the visual line of aim, by reason alone that the sportsman makes not sufficient allowance for the ascending motion of the bird in its flight from, or across his aim.

The young sportsman should never expect to kill if, at the time of pulling the trigger, he sees the bird on wing above the muzzle of the gun.

An obvious exception to the rule, is that of a bird flushed on a hill, and flying down into a valley ; when, if descending in its flight, unless the aim be below the bird, the sportsman must not expect to kill it.

Some guns are specially sighted and constructed for throwing the shot nearly two feet above the aim at forty yards : this may be done by a very thick rib, high at the breech end of the barrels, and tapering to nothing at the muzzle. But such are mere artificial contrivances, and are unreliable, particularly if the bird be *rising* in its flight at the moment of firing the gun.

The mistake young sportsmen make is, that they will insist on seeing the object of their aim, as they look along the top of the barrel, at the instant of drawing the trigger ; the natural and inevitable consequence of which is, that the shot, instead of striking the moving object, flies directly under or behind it : whereas, if sportsmen would only cover

the object with the muzzle of the gun at the moment of pressing trigger, instead of taking a sight along the top of the barrel, they would probably have the pleasing satisfaction of finding that, so far from missing or wounding almost every time they shoot, they would kill their birds as a "Dead Shot" kills them.

There are but few sportsmen in whom the fault of missing lies in their shooting too high or too forward : it is almost always the contrary.

One of the commonest errors occurs in shooting at birds crossing to right or left.

It is astonishing how stubborn young sportsmen are to believe in the rudimentary principle, that it is indispensably necessary to fire in advance of a swift-flying object ; whether to right or left, for the purpose of killing it: they persist in the foolish notion that almost on the instant of pulling trigger, the shot reaches the object aimed at. In the very early years of my life I was one among that stubborn class, until convinced of my error in a simple but somewhat extraordinary manner, which I will now relate for the purpose of endeavouring to impress upon my readers the importance of this fundamental principle. I was out shooting alone one day, in the month of October, in a large turnip field, with my dogs and gun, when a brace of partridges rose at the distance of fifty-five or sixty yards : they flew rapidly to the right, in direct line, one behind the other, at a space of about two or three feet apart. I took

deliberate aim a few inches in advance of the leading bird, and fired ; when, to my surprise, the hindmost bird fell dead, and the leading one, which was the object of my aim, flew away untouched. At the moment I felt so astonished at the result, that I could not recover myself soon enough to discharge the other barrel at the bird which had flown away. On picking up my bird, and carefully examining it, I found five shots had struck it in the head and neck ; so that my aim, which was at least two feet six inches in advance of the bird killed, was not any too much at the distance and rate at which it was flying. I felt so forcibly the erroneous notion upon which I had hitherto been shooting, and so delighted at the lucky but accidental discovery I had made of my own error, that I felt as if a curtain had risen before me, and revealed the true secret of the art of killing cross shots. And I can truly assert that this simple but singular discovery, thus early in my shooting career, did more towards improving me in the art of shooting, than all the advice and instruction I had received from practical and venerable sportsmen. Some of my sporting friends, shortly afterwards, on congratulating me on a " very sudden and wonderful improvement in my shooting at long ranges," inquired to what school of instruction I had been ? I then related the circumstance above recorded, and, as they said, " very much to their own edification."

If facts such as these fail to convince the young sportsman of his error in not shooting forward enough at cross shots, I should despair of being able to place before him stronger argument, or of ever making him a "Dead Shot."

TAKING AIM.

"Close neither eye—some good shots say,
 Shut up your left : that's not my way ;
 But still a man may take his oath,
 He'd better shut one eye than both."—WATT.

Many sportsmen say they never "take aim;" that when a bird rises they keep their eyes upon it, and on levelling the gun their hands and fingers obey the eye without any aim. Now, although some sportsmen may fancy they take no aim, because they do not actually look along the barrel, and bring the sight-piece to bear upon the object, as a rifleman would; the very fact of levelling the gun and pointing it at the bird the eye dwells upon, is taking aim. An old and skilled sportsman never draws the trigger till he feels certain that the bird is covered, or in other words that his aim is correct.

There is of course a wide difference between deliberate aim and instantaneous or snap-shot aim, though both are used at flying objects by every sportsman, as occasion and necessity require.

As a proof of what may be done by training and

practice there are some men who can hit flying objects without even putting the gun to the shoulder; as by resting it on the hip; the eye following the object and the hand obeying the eye as it calculates the distance and line of aim: but this cannot be done with unerring certainty; and only at objects which fly, or are made to fly, very steadily.

In taking aim with the gun at a flying or running object, it is quite unnecessary to close either eye: though at a sitting object the left eye may be closed or partly closed with advantage: as with the rifle, the left eye must be either wholly or partially closed, for the purpose of bringing the sight-piece at the muzzle in a correct line with the notch or elevating sight. But rifle practice in this respect is totally different to shooting with a gun.

You must not look along the barrel of a gun when taking aim at a flying object, particularly if at long range. The eye must follow the bird, and never for an instant be taken off it until the trigger is drawn.

At birds on wing at a long range, it is a good plan to partially close or compress the eyelids of the left eye at the moment of taking aim and firing; taking care to keep the gun moving, and steadily following the bird until *after* the trigger is drawn.

But, as a rule, a Dead Shot rarely closes or even compresses either eyelid.

GRAVITATION.

It is impossible for any man to become a Dead Shot, until he is familiar with the laws of gravitation. Simple and natural as those laws will appear on explanation and reflection, there are thousands of sportsmen who have erroneous ideas about them. I have often been astonished at the ignorance in which I have found experienced sportsmen, on discussing the subject with them.

I have no hesitation in saying,—if a man ever hopes or expects to shoot well, he must have some knowledge of the fundamental principles of gravitation: he must remember that all material substances, on being forced through the air unsupported, incline towards the earth; that is, they keep dropping nearer and nearer to the ground as they proceed through the atmosphere. So also with shot, as it passes through the air, forcibly expelled by gunpowder; and whether slowly or swiftly, it is influenced by the laws of gravitation, from the moment of its expulsion from the barrel, until its horizontal force is exhausted, and it falls to the ground. The trajectory course of the shot is curvilinear; consequently, if a straight barrel of the same substance throughout—that is to say, as thick at the muzzle as at the breech—were fired in exact

horizontal line with a distant object, the shot would strike considerably below it.

The elevated rib which divides the barrels, is therefore of great assistance to the shooter in bringing up the muzzle-end of the gun above the horizontal interior of the cylinder: so also is the greater thickness of the barrels at the breech-end. But these do not alone raise the muzzle-end sufficiently when shooting at swiftly flying objects at a long range.

The reason therefore why many young sportsmen kill flying objects with tolerable certainty when within short range, and miss those at long range, is because they always fire nearly point-blank at everything, regardless of distance and other important considerations. When they kill, the objects are in fact so near that there is no perceptible declination of the shot, or not sufficient for the bird to escape all the strong shot; whereas, on the other hand, by taking the same point-blank aim at more distant objects, they are missed through not allowing for declination or gravity of the shot, and speed of the flying bird.

It is calculated that at forty yards the gravitation of the shot is four, and at sixty yards, fully eight inches.

At the moment of taking aim, and levelling the gun point-blank at the bird, the visual line would be right if the shot could be conveyed to the object instantaneously, and without being affected by the

laws of gravitation. But such a thing is impossible, because, in addition to the declination of the shot, the trigger has to be drawn, and the shot has to travel through the air, the whole distance between the gun and the bird; during which, the bird is probably all the while gradually rising, and the shot gradually falling; so that, by the time the shot reaches the end of the supposed visual line of aim, the distance below the object aimed at, and the hitting place of the shot, is several inches; and thus it is, through neglecting to consider carefully these simple principles, that young sportsmen shoot at flying objects and miss them.

It must however be remembered that in the construction of the gun, the line of sight and the line of projection are not parallel; especially with a gun that has an elevated rib, consequently, if the line of sight along the rib of the gun be the line of aim, there will always be an elevation of four or more inches at a range of forty yards and upwards: and with a very thick rib the elevation would probably be six or eight inches: *i. e.*, if a straight line be drawn along the rib of the gun to a distance of forty yards, and another straight line from the axis of the calibre, the latter, at that distance, will be six or eight inches higher than the former. The value of the elevated rib in counteracting the effects of gravitation, and in compelling the sportsman to keep the gun up, was well understood by that

famous gunmaker, the late Joe Manton, who in the construction of his guns, never lost sight of the importance of keeping the visual line of aim well up above the line of projection, and he fitted his guns accordingly.

At the present day however there would seem to be a tendency to disregard these matters, as guns with a low rib are more commonly to be met with than those with a high one. And the extra thickness of the barrels at the breech-end scarcely makes up for the thick elevated rib of the Joe Manton period.

In shooting with guns, at long ranges, if sportsmen would only consider how rifles are fitted with elevating sights, whilst guns have only one fixed elevation, they would, on reflection, see the necessity of making the suggested allowances for gravitation at long shots.

It will therefore be seen that, in taking aim at a flying object, at a long range, the gun should not be held in such a manner that the visual line is upon a level with the bird, but allowance must be made for the tendency of the shot to fall to the ground, for the rapid motion of the bird, and for the time which must elapse between the instant of drawing the trigger and that of the shot hitting or reaching the object; consequently, the visual line of aim should be both above and in advance of the flying object, more or less, according to the range: the

one to allow for gravitation of the shot, and the other for the space which the bird advances between the time the aim is taken, and the precise moment of the shot hitting it. Therefore, let the sportsman who would become a "Dead Shot" ever bear in mind, that the longer the range the higher must be the elevation, because the greater will be the gravitation of the shot.

DEFLECTION.

By practising at a target in windy weather, the sportsman will soon learn something of the theory of deflection. Of course, the subject more materially affects rifle practice; nevertheless, it is also an element for consideration in the art of shooting birds on wing. The sportsman should place the target in an open field, so that the wind blows across or to right or left as he faces the target.

On firing at the various distances of 30, 40, 50, and 60 yards, he will probably be somewhat surprised at the deflection of the shot, through the force of the wind; and will find his charge driven considerably to leeward.

By neglecting to make due allowance for deflection when shooting in strong winds, it is impossible to kill at long ranges.

RANGE.

Range is the rock upon which many young sportsmen wreck their best chances.

When the sportsman is upon the moor or the stubble with gun in hand, in pursuit of game, the moment a bird tops the heather, or is fairly upon wing above the stubble, his judgment must be formed as to whether it is within range, or so far out of range that it will be useless to shoot at it. If he hesitates the bird is lost. His eye and previous experience are his only guides. He ought to know by the size and appearance the bird presents to the eye, and by the space that lies between the spot from which it rose and that at which he stands, if the bird is within range: and relying upon such, his knowledge, he must immediately form his judgment, and use his discretion accordingly, as to the utility, or otherwise, of levelling his gun and shooting.

An experienced sportsman never hesitates a moment under such circumstances. He knows intuitively, the instant he catches sight of the bird, whether it is within range or without, and he acts accordingly. But to a young sportsman the difficulty, when out in the field, of readily estimating the range so as to shoot with effect is, truly, one of the greatest stumbling-blocks he encounters; as he sometimes mistakes the distance and omits to fire

at birds when within the best and most killing range, through fancying them out of his reach ; and on the other hand he frequently errs the other way, and fires at birds far beyond the range of his gun.

The question therefore arises—what are the bases upon which the judgment is formed, and how are such readiness and accuracy of decision to be acquired ?

To which I answer—

1st. By practice in the field ; and occasionally at birds released at measured distances (as pigeons from a trap) :

2ndly. By estimating various ranges with the eye and then testing them by actual measurement : and

3rdly, and particularly, by measuring frequently when out in the field, the various distances at which you shoot and kill ; and sometimes those at which you fail to kill.

The young sportsman should therefore provide himself with a measuring tape having the correct measurements marked thereon in figures, from twenty up to one hundred yards. By carrying the tape in his pocket when out with his gun, he will always be able, with very little trouble, to test the accuracy of his estimate, by actual measurement on the spot ; and to profit by the experience so gained, which will be considerable ; and will well repay him for his pains, by a prompt and decided improvement in his judgment and discretion, and consequently in his shooting.

Many a sportsman will find that unless he takes the trouble to measure and test his estimate of distances, and try experiments of the kind suggested, it is probable he will remain in error and miss many fair and simple shots at birds which he ought to have killed with unerring certainty.

Good shots are, invariably, good and accurate judges of distances ; and can measure, with the eye alone, a forty or fifty yards' range with astonishing accuracy.

Young sportsmen should observe that it is much easier to estimate distances in small enclosures and among high hedges and trees, than in large fields and extensive moors. In mountainous districts, sportsmen frequently make mistakes in regard to range ; particularly those who have been accustomed to a level country.

In Scotland, too, the mists which are sometimes prevalent on the moors, render it very difficult to judge with accuracy as to distances.

The three Deadly Ranges.—There are, nominally, three deadly ranges for the gun—viz., point-blank range, short or middle range, and long range.

Point-blank range is that at which you fire neither above nor in advance of the bird, but point-blank at it, making no allowance (or scarcely any) in your aim, for either the direction or the rapidity of its flight, nor for the gravitation and deflection of the shot.

Point-blank range can seldom be relied on at swiftly flying or running objects, beyond the distance of twenty-five yards.

But if the gun be high-mounted, and have an elevated rib, the point-blank range may be considerably more than twenty-five yards.

Point-blank range, when considered with regard to the gravitation of the shot, and that of shooting at a fixed or stationary object, is therefore, the range at which a gun will drive the shot to a given point relatively to the line of sight: and as more elevation is given to some guns than to others, and as some guns propel the shot with greater force than others, it is obvious that the point-blank range of one gun may be forty yards, whilst that of another may be but twenty-five. Some men will tell you that with a gun so sighted up to forty yards, there is no need to aim otherwise than point-blank.

The young sportsman will find, however, that such a notion is utterly erroneous, and that by taking point-blank aim at swiftly moving objects that are over twenty-five yards from him, he will seldom kill or even hit them.

Short or middle range is beyond point-blank range, but less than long range: it is that distance at which, with judicious aim and a good gun properly charged, a bird on wing may be killed with certainty; and may be said to be (ordinarily) any distance between twenty-five and forty yards. It is

also sometimes called ordinary range, deadly range, and certain range.

Long range, though one of the three deadly ranges, is a distance beyond that at which a good shot is certain to kill, though his aim be ever so accurate: therefore (with an ordinary-sized shoulder-gun), any distance beyond forty yards is termed long range.

All shots which are doubtful, because of the long distances at which they are fired, though not actually out of range, are at long range. The terms doubtful range, and uncertain range, are sometimes applied instead of the term long range. Fair range implies any one of the three deadly ranges.

With judicious loading, and a regard to the principles affecting range, either grouse, partridge, or pheasant may be killed with certainty at forty yards; but not always with an over or under-charge of either powder or shot, because of the uncertain and irregular spread of the shot when the gun is disproportionately loaded.

The chances are three to one that a good shot will kill at any distance up to fifty yards; he is certain at forty, if he takes pains to do his work well. With an extraordinary sharp-shooting gun or a choke-bore barrel, he may kill up to fifty-five or sixty yards, but not always; though if a perfect master of the art, he may kill two out of four at those distances, but not with an ordinary gun. The reason

is, that there is no reliable compactness or regularity as to the spread of the shot at such long distances, however accurate the aim and perfect the skill of the shooter; consequently many a bird escapes with its life from the truest aim.

Partridges and grouse may sometimes be killed at seventy and even eighty yards (cross shots), but never with certainty: no, not by the best shot in England, with an ordinary-sized gun: because no small-shoulder-gun, whether breech or muzzle-loader, and however carefully choked, will throw shot compact enough to make sure of touching a vital part in so small an object, at those distances. Forty to fifty yards are the very outside at which certainty exists. Anyone who fires at birds beyond those distances, with an ordinary-sized shoulder-gun, cannot be certain of killing. One or two grains of shot would probably be all that would strike the bird; and such are not sufficient to bring it down, unless they hit a vital part, or break a wing-bone. A bird possesses but few parts that are actually vital; and a partridge or grouse is a small object when its feathers are plucked off. Sportsmen who fire at long ranges should not forget these facts.

It is wanton and cruel mischief to shoot at unreasonable distances, with no possibility of killing: besides, too, it disturbs the game uselessly, to say nothing of wounding it in an unsportsmanlike manner.

STRAIGHT-FORWARD SHOTS.

“ But when the bird flies from you in a line,
With little care, I may pronounce her thine.”

MARKLAND.

At a bird flying straight away from the sportsman, his aim should be the top of the back of the bird, if within twenty or thirty yards ; and slightly above the back, if beyond that distance.

From forty to fifty yards is the extreme distance at which a partridge or a grouse can be killed with certainty (with an ordinary-sized gun), when flying rapidly in direct line from the shooter.

They may be wounded in the rump or elsewhere, at a farther distance, but are not likely to be hurt in a vital part : consequently, though wounded, they are not brought down. The reason is, that both bird and shot are moving rapidly in the same direction, and therefore, although the shot assuredly overtakes the bird, yet the rapid flight of the latter mitigates the force and power of the shot, which, consequently, do not penetrate the flesh so deeply, nor with nearly so much effect, as if the bird were stationary, or crossing at right angles, and so presenting a firmer resistance to the charge.

At straight-away-flying birds the young sportsman's general error is that he shoots too low.

Straight-away shots are often missed, particularly at swift-flying birds ; though not always through

the fault of the shooter. A bird going straight away, presents a very small mark, and its head is protected by its body: the aim must therefore be very true, in order that the central or strongest shot of the charge may hit.

Always sight your bird along the rib of the gun when the bird is going straight away; hold your gun so that your eye runs just over the back of the bird, and you may be pretty sure of stopping its flight if within range.

CROSS, QUARTERING, AND ANGULAR SHOTS.

When a bird crosses to right or left of the sportsman, within thirty yards, his aim should be at the head, if flying steadily; but if flying swiftly, an inch or more in advance of the head; if forty yards, five, six, or eight inches; and so more or less in advance according to the rate of flight and distance.

It has frequently been suggested that in consequence of the quicker and more instantaneous ignition and explosion of the powder in some of the modern central-fire guns than in those of the days of the cap-and-nipple gun, there is less occasion for shooting so far in advance of a crossing bird. That, however, depends entirely on the power and rapidity of its flight; and although the suggested difference may apply to the old days of the flint-lock and

flash-pan, the young sportsman will find, that whatever form of gun he uses, and however quick the ignition, the line of aim must be considerably in advance of a swiftly crossing bird.

For cross shots the gun must be held so that the central pellets of the charge will reach the spot where the bird will be when the trigger has been pressed, the powder ignited, and those pellets have travelled through the air to that identical spot. In other words, shot and bird must both arrive at the same spot at the precise instant. It is of no use for the shot to arrive at the spot where the bird was at the time the aim was taken and the trigger pulled.

At birds which do not directly cross, but which go off at various angles, quartering more or less to right or left, hold your gun less in advance than at those which pass at right angles.

When fair-flying, cross, or side shots are missed by young sportsmen, it is generally because the strong shot, or central pellets of the charge, are driven behind the bird, or through its tail. It is of no use to riddle with shot the tail of a bird; the head and fore-part contain the vital organs; therefore, hold your gun more ahead of the bird and slightly above it when you find you miss fair cross shots, and you will soon be both surprised and delighted at the improvement in your shooting.

If a bird crosses very swiftly at right angles, at a range of sixty or seventy yards; in order to kill

it, or even to hit it, you must aim not only two or three feet in advance of its head, but also two or three inches above it.

If the bird crosses to the right, incline your head over the gun, and shoot well in advance.

Among cross shots may be included rectilinear, oblique, acute, and obtuse angular flights; also transverse and curved lines of flight, with some others; all of which require a due allowance according to velocity, and the acute or obtuse nature of the angle or lineal direction of the flying object.

Never refuse a cross shot, though it be fifty or even sixty yards off. Cross shots may be killed at much greater distances than straight-away ones, for two reasons: one, because the more vulnerable part of the bird or animal is exposed to the fire; and the other, because the shot strikes with much greater force at a crossing object than at one flying in the same direction as the shot.

When a bird crosses to the left, step forward with the right foot; and *vice versâ* if it crosses to the right. The reason for this suggestion is, that if the right foot be first when the bird is crossing to the right, it is sometimes difficult to bring the gun round far enough without turning the body; and the necessary turn may be instantly dispensed with, by bringing the left foot forward.

When a bird rises very close to you, be in no hurry to level the gun: it is the protracted levelling

that often causes young sportsmen to miss; the hand becomes unsteady through it, and the eye is less to be depended upon.

ASCENDING SHOTS.

These are of daily occurrence with all birds that rise from the ground. If they get up at long range, in order to kill, the sportsman must shoot at his bird as it rises, and in so doing must take care to fire well *over* and above it. Few but experienced sportsmen kill ascending shots, the error of young and inexperienced ones being, that they aim too point-blank; consequently, the whole charge flies underneath the rising bird, and it escapes unharmed, or at the worst with riddled toes and tail.

It is absolutely necessary (if intending to kill) to shoot considerably above a quick ascending bird, as a partridge or pheasant.

The best preliminary practise for this lesson is at larks, which are, probably, the steadiest rising birds of any of the feathered tribe.

DESCENDING SHOTS.

When a bird is flushed on a hill, its flight is almost certain to be in a descending direction; the aim in such case must therefore be slightly below,

and more or less in advance, according to the speed of the bird, when crossing to right or left: and when the direction of its flight is in a straight line, descending from the sportsman, the aim should be at or just under the legs of the bird, if within thirty or forty yards; and a few inches below the legs if beyond that distance.

The young sportsman should also bear in mind, that as a bird approaches a high hedge it rises in flight; and immediately on clearing the fence it descends: he should therefore regulate his aim accordingly.

These minutiae, though seemingly of trifling importance, are really essential considerations for the young sportsman, and should never be lost sight of in the field.

APPROACHING AND PERPENDICULAR SHOTS.

“When a bird comes directly in your face,
 Contain your fire awhile, and let her pass,
 Unless some trees behind you change the case;
 If so, a little space above her head
 Advance the muzzle, and you strike her dead.”

MARKLAND.

An approaching bird, or one that is flying towards the shooter, is not a difficult shot if its rate of flight be steady: but if rapid, it may present a very trying shot to a young sportsman.

Approaching birds are more frequently missed from under-shooting than from other causes.

At an approaching bird, when within from twenty-five to thirty-five yards, let your line of aim be at its head, and you will rarely fail to kill. If at a longer range, aim just in advance of its head. But if the bird be flying towards you close to the ground, or only five or six feet above it, by shooting as it approaches, your shot will probably glance off the feathers of the breast without penetrating the skin, and the bird will fly away unharmed.

At birds so low in flight, the moment they come within range, the sportsman should show himself or suddenly raise his hand, when they will generally make a turn and quarter off to right or left, presenting as fair a shot as he could wish for.

Many sportsmen, who in all other respects are good shots, frequently miss birds flying directly overhead, particularly if in rapid flight, or going down-wind.

A great deal must depend on the altitude at which the bird is flying; but, in general, these shots are missed through firing too soon, or too late: the one before the bird has approached within range, the other after it has passed overhead. If sportsmen would only consider and practise a few perpendicular shots, they would find none are easier: there is plenty of time for deliberation when the bird is seen approaching. If the bird is in steady flight, you

may take your time: and sometimes by merely showing yourself when it comes within range, the bird will turn and present its most vulnerable parts to your aim.

If the bird is in rapid flight it is generally advisable to shoot as it approaches, if not at too high an altitude, when it comes within thirty or thirty-five yards: in which case, if killed, it will generally fall close to your feet. But if it be flying at a high altitude, you must wait until it is nearly over your head, and then fire several inches in front of it, more or less according to the pace of its flight. If in very rapid flight, two or three feet in advance of its head will not be too much.

An advancing bird, at a steady flight, presents a very fair and pretty shot, and if taken in time is by no means difficult: fire at its head the moment it comes within range, and you may be sure of killing, if your aim be true. But when the bird is at such a height as not to be within range until over your head; then, the instant it comes within range, lean back a little, take a good aim, and fire several inches in front, according to the speed or pace of its flight.

As a rule, however, by waiting until the bird has passed over your head, you lose your very best chance; because, independently of the greater accuracy of aim, you lose the additional effect produced by the bird being at an acute angle with the shot.

By shooting at the bird as it advances, or even perpendicularly, you have also the chance of a second shot in the event of missing the first.

One caution is necessary in regard to perpendicular shots: the gun should be placed to the shoulder as if for a horizontal shot, and the sportsman should then lean back. If the heel of the gun be incautiously placed on the top of the shoulder, and so fired perpendicularly, it will inevitably break the collar-bone. A small gun, loaded with only two drachms of powder, will break a man's collar-bone, if fired straight up in the air from the top of his shoulder—the man standing upon hard ground. Accidents of the kind have occasionally occurred at rook-shooting parties, and in flight-shooting at wild fowl, through firing from positions directly beneath the birds.

SNAP SHOTS.

Snap shots are those which, of necessity, are made very suddenly and quickly, or not at all.

They occur chiefly in the coverts; as for instance at woodcocks, or other birds, when they show themselves but for an instant, and then dodge about behind trees and other obstructions: so also at rabbits, when they pop out of one thicket and into another in a moment; so that it is impossible to

take deliberate aim, as you only just catch a glimpse of them, and must fire at once or not at all.

The missing of a snap shot is always very excusable. To kill is very creditable.

In thick cover you rarely get any but snap shots at woodcocks: but most sportsmen always shoot at them at first glimpse, under such circumstances.

When a snap shot offers, fix your eyes immediately upon the object, and instantly swing your gun to its place at the shoulder. If a bird, hold well forward, regardless of twigs and such like slender obstructions, and fire at once without the scintilla of a second's delay.

If a rabbit, darting into cover, hold your gun in advance of its head, so as to shoot into that part of the thicket where Bunnie's head will be in the next instant. It is always useless to shoot at the hind-quarters of either rabbit or hare; as it is also at the legs and rumps of birds: because although you may wound, not one in ten can be bagged. They get away, and hide in the hedges, where they die a lingering death, or are devoured by prowling vermin.

FINISHING LESSONS.



Having previously acquired, by frequent practice, the safe, ready, and artistic manipulation of the gun, with perfect command of the nerves; and having also carefully followed the rudimentary instructions contained in the previous pages of this work: the young sportsman must now obtain as much practice as possible at birds on wing, following up the pursuit with energy and perseverance; taking pains with his shooting, and examining himself from time to time by inquiring into the whys and wherefores of his having missed fair shots; sifting to the bottom any apparent defects in his shooting, and profiting by the experience and companionship of others.

He should persevere until conscious of his skill, which sooner or later he will feel; and then he will at least have gained one step towards the attainment of the object of his ambition.

Success in shooting, as in other arts, begets confidence, and confidence dispels nervousness and disappointment, two formidable obstacles to good shooting.

Some men are, undoubtedly, more highly gifted

than others with the physical qualifications which ensure success, when combined with practice and perseverance. But withal, time and opportunity are required in order to make a man a Dead Shot.

A sportsman who is ambitious to become a Dead Shot, must not be content with merely winging or wounding his birds at forty yards, or other fair distances; he ought to kill, so that the bird fairly dies in the air, and lies at the spot where it falls: it may then be recovered, after reloading, either with or without the assistance of dogs. To wing or wound is only excusable at long range, or random, doubtful, cramped, or other difficult shots.

The sportsman must therefore be well acquainted with the power and capabilities of his gun, and have his cartridges filled with the most penetrating charges: bearing in mind that the secret of penetration is a liberal charge of powder, which involves a gun that has plenty of metal at the breech, good calibre, and good weight. Thousands of birds are hit but not bagged, because they are not hit hard enough.

Another important element in the art is the use of small charges of shot; also smaller in size than are commonly used by some sportsmen; the reason for which is, that such may be driven with greater force and velocity than heavy charges of large shot, and also with more compactness; and being so much more numerous, there is far less chance of

escape for the bird ; some of the pellets (with true aim) being certain to penetrate the vital parts, if the bird be within fair range, and the shot be driven with a sufficient charge of powder.

The object should be, not only to hit, but to kill : in fact, it is of no use to hit without killing.

Large shot "mangle" the birds by breaking every bone in the skin, when near enough ; and if above thirty or thirty-five yards, the chances of killing with large shot are very uncertain, as the central or strong pellets of the charge are so few and far between, that the bird frequently escapes, though the shot fly all around it. But with small shot and a full charge of powder, an experienced sportsman will rarely fail to kill up to forty yards : beyond which distance there is no dead certainty with a shoulder-gun of ordinary size and weight.

A professed good shot ought always to kill a brace out of every covey that rises before him, in open field, within the distance of thirty-five yards.

Confidence, perfect self-composure, a quick eye, and good judgment, are indispensable qualifications in a good marksman ; and the hand and eye must act in unison, or as if connected by electricity. The error, more frequently than otherwise, rests in the finger which draws the trigger being too late in obeying the eye and the aim.

No sportsman can shoot well, though with the best gun ever made, if he be hesitating, flurried,



SO HO ! PONTO !

hasty, or careless. The slightest tremor, one nervous twitch, at the instant of pulling the trigger, and the steadiness of the aim is lost! and consequently the bird is missed!

When a bird gets up, if you intend to shoot it, keep your eye upon it, and not upon the muzzle or sight-piece of your gun. The eye should not be taken off the bird from the moment you have selected it as the object of your aim, until the trigger is pulled. The sympathetic action of the trigger-finger with the eye, enables you to kill if your aim be true, but if you take your eye off the bird, and look along the rib of the barrel, the instant before, or at the time of firing, the probability is that you will miss the object of your aim. Endeavour to hold your gun forward enough, so that the centre of the charge will be upon the bird when the shot reaches it.

So faithfully must the bird be covered at the moment of taking aim, that, when flying across or transversely, in order to kill it, whilst you are pulling trigger you must in some instances actually lose sight of the bird, by reason of the bearing of your gun being both above and in advance of it.

Great attention and steadiness are required in presenting the gun at a flying object; taking care to be neither too soon nor too late in so doing. Raise the gun into its exact position at the shoulder, and the instant you feel that your aim is right, if the trigger finger obeys, you may be certain of killing.

On halting to fire, stand erect, in an easy and natural position, and, as easily and readily raise the gun to your shoulder and drop your bird. If it rises very near, follow it with your eye until it has gone a fair distance, and then raise the gun to your shoulder and shoot ; when, if your aim and calculation be correct, the bird will fall dead, but not cut to pieces ; on the contrary, so cleanly shot, that scarcely a feather will seem to be ruffled : if blood oozes from the mouth, such will be a certain indication that the bird was hit in a vital part : and always bear in mind that the vitals lie in the forepart of the bird, not in the hinder. If young sportsmen would only remember that little fact, and shoot forwarder and higher at flying and running objects, they would have the satisfaction of killing oftener, instead of merely wounding.

Never dwell on your aim. If the bird be flushed too near, be more deliberate in bringing the gun to the shoulder, so as to allow the bird to get to a proper range, then cover it with your aim and down with it.

When holding on at a fast flying or running object, take care that you do not involuntarily stop the motion of your arms and gun, (called the "swing,") as they follow the object at the moment of pulling the trigger. Want of attention to this is too often the reason why the shot passes below and behind the object. Accustom yourself to keep the

gun to the shoulder a moment or so after you have pulled the trigger, and you will eventually overcome that great defect in your shooting, and thereby gain a capital point towards becoming a Dead Shot. The contrary habit, when once acquired, is very difficult to correct, and sometimes prevents a quick, sharp-sighted sportsman from ever shooting well.

When the bird is flying rapidly to right or left, let the swing, or motion of the gun be kept up whilst, and for the instant after, pulling trigger: the space of a yard or more in flight is gained in a moment.

It is the interlapse (however slight) between the correct aim and the touch of the trigger, or impulse of the shot, which is the secret of many a miss at a rapidly-flying object.

At right, left, and cross shots of every kind, the aim must be in advance of the bird, but whether an inch or two, or a foot or more, must always depend on two things--one, the distance of the bird, the other the rate or swiftness of its flight. If the bird be within short range, the aim need be but slightly in advance; if at long range, considerably in advance. And so also if the flight of the bird be slow or heavy, the aim may be but a trifle in advance of its head: if rapid or darting, at least a foot or more in advance. The intelligent sportsman, with practice, will acquire the art of estimating, as by intuitive perception, the pace and velocity of flight, and will point his gun accordingly. Practice alone can perfect him in this

advanced branch of the art of using the gun with skill and precision.

Remember, too, on flushing a bird, that the further it gets the faster it flies. It is very important to bear this in mind, so as to take care to shoot whilst the bird is within range, and to regulate your aim accordingly; so that it be much more in advance in the case of birds at long range.

If you find from repeated experiments that you shoot too low, make a firm resolution, and constantly bear it in mind throughout the day, to shoot higher.

Mr. Blaine,* says: 'Shoot at the head in every direction, if possible;' adding, that he 'cannot see any necessity for greater allowance.' But such theory can only be applied to objects within point-blank and short ranges; because experience teaches, that considerable allowance *must* be made for range and swiftness of flight.

The man who would shoot flying objects with skill and precision, should take pains to acquire the combined qualities of steadiness, with prompt decision, and dexterity in the manipulation and use of the gun; and it is indispensably necessary that there be a sympathetic action between the eye and the finger which draws the trigger.

Many ardent sportsmen never become good shots,

* Blaine's "Rural Sports."

though in constant practice, through a want of such qualifications.

The art of measuring distances with the eye is a great accomplishment in a sportsman, and is of essential value ; it is only to be acquired by practice and experience, and by shooting at a mark from various measured distances, and by measuring the ranges at which you kill, whenever in the field, as already suggested (*supra*, p. 95).

And the simple fact that there is a tendency towards the earth (called gravitation), in every inanimate substance moving by force through the air, (as shot from a gun) is too frequently lost sight of ; whereas no sportsman can ever become a good shot, or kill objects at long distances, who disregards that indisputable law of nature.

Never allow a fair chance to slip without trying your skill ; that is to say, if a bird rises within range, down with it. Though it rise ever so suddenly, and the surprise be ever so great, if your nerves are quiet and your aim true and steady, the bird is yours.

Follow up a trustworthy dog, even to unlikely-looking places. He who follows his dog up closest, makes the heaviest bag.

Remember, also, that it is the silent sportsman who gets nearest to his game, not the talkative one.

GOLDEN SECRETS.

There are three elements in accurate shooting at flying objects, which, though before mentioned in detail, I would fain repeat for the purpose of impressing them upon the mind of the young sportsman as "golden secrets." They are these:—

1. At straight-forward shots, keep your head erect, and let your line of aim (or visual line) run along the back of the bird at the instant of pressing the trigger; and you may then be certain of killing.

2. At a bird crossing to the right, incline your head well over the gun, and let your visual line run level with the head of the bird, and more or less in advance, according to the angle of its flight, the distance and pace at which it may be flying when you shoot.

3. At a bird crossing to the left, keep your head straight, pitch your visual line upon a level with the head of the bird, and hold your gun more or less in front of it, (having regard to the angle of its course,) at a distance varying from one to twenty-four inches or more, according to range and the pace of its flight.

Without a strict adherence to these three rules it is impossible for any man to become a Dead Shot; whereas, by following them up to the very

letter, a bad shot will assuredly become an accurate marksman.

In addition to these, and as subsidiary to the art of becoming a Dead Shot, is the secret of deep penetration, or hard-hitting, which is effected by the use of a liberal charge of powder, and a sparing one of shot.

Another of such subsidiaries is that of using *small shot*, smaller than is commonly used by the majority of sportsmen.

THE MAN WHO NEVER MISSES.

The young sportsman should never vex himself by reckoning the number of shots he has missed. It is well to think nothing about them; because missing a few shots, whether successively or otherwise, when out in the field, is no reliable indication that the sportsman is a bad shot.

The most faithful test is the result of the whole day's shooting, or the average of several successive days.

One meets occasionally with sportsmen who, in their own immediate neighbourhood, have the reputation of being Dead Shots; and who are said to "never miss." Which, however, on being put to the test, is not infrequently found to be true in theory only, and not in practice. I have been out

shooting with many such, and have generally found that they could never sustain their reputation throughout two successive days of good shooting; provided they fired every time they had a chance of killing, and without picking their shots; or rather, making a selection of shots, availing themselves only of those which suited them, and rejecting all others.

A fairly good shot may go into the stubbles in the month of September, and shoot from morning to evening without missing; or he may bag as many birds as he has made shots; but to do this he has probably fired only at birds within short and certain range: and refused all at long range, as well as those which were doubtful and difficult, for it stands to reason that he could not be certain of killing either of the latter at long range; though chance and good skill might enable him to kill half the number of the doubtful and difficult ones, or even two out of the three; but it is absurd to suppose that he can kill all such at long ranges. One doubtful, difficult, or cramped shot at long range, when successful, is, to many a good sportsman, worth half-a-dozen easy or certain ones: he delights in it because it was doubtful; and he knows, besides, that it taxed his skill to the utmost; and no aspiring sportsman will care for missing any but downright fair and easy chances.

Therefore when one hears a man boasting of

having been shooting all day, and filled his game-bag 'without missing a single shot,' one is sometimes disposed to suspect that he has selected all the favourable shots, and refused many, if not all, the doubtful and difficult ones; whereas those are the very shots that would have taxed his skill.

To constitute a Dead Shot, it does not follow that a man should kill every time he draws the trigger; because if he makes random shots it is impossible but he will sometimes miss, or at least that he cannot always kill; though he may always either wound or kill.

Let the young sportsman console himself with the fact, that the most skilful, the most experienced, and the deadliest shots *sometimes* miss even fair chances; though, certainly, very seldom.

Very long shots are always chance shots; and of such, to one successful there belongs three unsuccessful. For, notwithstanding that the sportsman's aim be correct, the scattered and uncertain hitting of the shot (particularly if large) makes it three to one against killing at a very long range, or at any distance over fifty yards. The proof of this statement is exceedingly simple: let the sportsman measure the distance, put up a large sheet of paper, and fire at it; and he will probably be surprised to find how widely scattered the shot strikes at such a long range, and how easy it is for a bird to escape, though the aim taken be as accurate as possible.

THE BAD SHOT ;

OR THE UNSKILFUL MARKSMAN.

By some country gentlemen the reputation of being a "Dead Shot," or even a "Good Shot," is one that is held in high estimation ; whilst that of being known as a "Bad Shot" is very distasteful.

Shooting is undoubtedly a work of skill ; it is, however, impossible that all men can be good shots. But in shooting, as in all other pursuits in which skill predominates, there are always those who aspire to excellence, consequently there are various grades of performers. Among sportsmen there is great rivalry ; all endeavour to excel, though but few succeed in so doing : some are more or less skilful, whilst others have no skill at all. It is the latter class who are generally termed "Bad Shots."

A Bad Shot, however, is, or ought to be more an object of sympathy than of ridicule. Very often he is, notwithstanding, a remarkably good fellow. It is seldom his own fault that he is unable to shoot as well as his companions. He probably endeavours to do so, but lacks that combination of qualifications which would fit him for the pursuit ; such, for instance, as steadiness of nerve, quickness of perception, dexterity in the manipulation of the gun, soundness of judgment and discrimination as to

range: and if, notwithstanding his failings, he will not steadily apply himself to seek out and discover his deficiencies, and endeavour to improve himself, he is in that respect an unfortunate individual; for he can never become a good shot until he acquires, by practice, some, at least, of the qualifications which belong to one. Generally speaking, an unskilful shot is more or less nervous and excitable: perhaps vexing himself at the result of every shot he fires: and though his companions may smile at his attempts, they are by no means pleased to see him banging heavy charges at coveys of partridges, wounding several but killing none. His dog becomes suspicious of him, and grows careless in its work; because it so seldom has the chance of "mouthing" a bird and rubbing its nose into the plumage; which is always as great a delight and satisfaction to a dog in the field, as are the choicest and most fragrant exotics to a lady in her boudoir.

A Bad Shot so seldom kills, that if by any chance he happens to bring down a bird, he is so delighted that a race immediately ensues between him and his dog, as to which will be the first to recover it.

Being a poor judge of distances, he fires indiscriminately, either too soon or too late. If he kills in the one case the bird is so mangled that it is not worth the cooking; and in the other, it is only winged, or so slightly wounded, that it occasions

more trouble in the retrieving than it is worth. Well may the poet sportsman say of him :—

“ There sprung a single partridge ! hah ! she’s gone !
Oh ! sir ! you’d time enough—you shot too soon ;
Scarce twenty yards in open sight ! for shame !
Y’ had shattered her to pieces with right aim ! ”

When he has been over a manor abounding with birds, and returns home with a brace or two only, he feels bound to acknowledge the fact of there being plenty of birds, but consoles himself, or accounts for his ill-success, by saying they were so very wild he could not get near them.

When shooting with other sportsmen, he sometimes endeavours to account to them for his bad shooting by various excuses, and appeals to the gillie or beater for consolation, by asking if they did not notice the feathers fly and the bird flinch ; adding, that it was ‘ A little too far ! ’ ‘ My shot is too small ! ’ or something to that effect.

And this reminds me of an anecdote of a very Bad Shot, who had been out day after day on a moor, in the north of Scotland, abounding with grouse ; at which he blazed away incessantly, but without bagging a single head. After endeavouring by various excuses to account for his lack of skill, he ventured to seek consolation at the hands of his attendant, the gillie (a cannie Highlander) by interrogating him as to whether he could account

for the shooter's bad luck. Whereupon the gillie inquired 'Is ye're gun gude?' and on receiving a reply in the affirmative, asked—'Are ye're powder and shot gude?' and on the reply that all were as good as could be obtained for money; the gillie said—'Then ye're no gude yersel.'

It is said of some men, that, rather than have it thought by their friends at home that they are bad shots, they occasionally shoot with silver shot, *i.e.*, fill their pockets with game they have purchased of a dealer.

As a rule, all bad shots shoot both behind and below their birds; consequently, whenever they chance to knock a bird down, it is never hit in the head, but almost invariably either in the legs or the rump—the least vulnerable parts; and so, if knocked down, there is always a difficulty in recovering it.

Wherever a bad shot has been shooting over a well-stocked manor, there are sure to be a number of cripples and Chelsea pensioners.*

Let the sportsman beware, therefore, lest his reputation suffer on the discovery being made, that his manor is encumbered with too many Chelsea pensioners; for such, in the eyes of good sportsmen, is a sure indication that a bad shot has been shooting over it.

An unskilful marksman seldom kills a cross shot,

* One-legged birds and three-legged hares.

because he shoots *at* the bird instead of *in front* of it.

As a general rule, a bad shot kills nothing but straight-forward shots; and those only at point-blank or short range.

Let me remind the unskilful marksman, that unless he occasionally kills a few birds, his dog will attempt to kill some for him; and, in the keenness of disappointment at its master's fruitless attempts, will run in, chase, and perform many other uncontrollable actions, and even run away home.

To mangle a bird by breaking every bone in the skin is unskilful sport; so also to merely wing, or hit it hard in the rump, or to break both legs, is equally unskilful, and is very bad shooting.

A young sportsman should beware of purchasing a dog, however cheap in price, and however well-bred, of a man who has the notoriety of being a bad shot.

THE POT-HUNTER.

The term "pot-hunter" implies one who shoots for the "pot" rather than the "sport." Generally speaking, a pot-hunter is not only a very bad shot, but more or less a poacher, for he is unscrupulous as to how and where he obtains his game. He makes no hesitation in trespassing upon his neigh-

bour's land, and rather delights in bagging game by stealth.

He disregards alike the rules of fair sportsmanship, as he does the first principles of honour and integrity.

The pot-hunter will shoot partridges on the ground, a hare on her form, or a rabbit in the hedge. He seldom has a companion in the field, unless it be one of the same stamp as himself.

He who will poke his gun through a hedge and shoot at birds basking in the sun or running along the ground, is not only a pot-hunter but a contemptible fellow in the eyes of every English sportsman; and he is, besides, generally a poacher, for a man who will condescend to such meanness, is seldom very scrupulous as to where, and by what means, he can fill his pockets: and therefore the temptation, on peeping through a fence and discovering a covey of partridges basking in the sun, on his neighbour's manor, is to the pot-hunter an irresistible opportunity: and, accordingly, after looking around him to see that nobody is near, he slyly thrusts the muzzle of his gun through the hedge and fires into the midst of the unsuspecting covey, killing, perhaps, three or four and wounding nearly all the rest.

Such are a few of the leading characteristics of the pot-hunter, whose companionship, it is almost needless to add, is shunned by all true sportsmen.

THE NERVOUS SPORTSMAN.

There are many sportsmen who, do what they will, are unable to avoid a painful trepidation, palpitation, or state of nervousness when walking up to the dog at its point; and the same if a bird or covey rises suddenly, without being pointed by the dog. Such feelings and pulsations are, of all things, the greatest drawback to good shooting. Many say, "Oh! if I could only throw off this nervousness, this anxious or eager desire to kill, this fluttering of the heart when the bird rises before me,—if I could but take these things coolly, and treat them as of less importance, what an excellent shot I should be!"

An ungovernable nervousness is a great and almost insurmountable obstacle to a man ever becoming a proficient in shooting. If such a man ever shoots well during the day, it will be at a moment of unconcernedness, or when he is quite indifferent as to the result.

The only remedy that can be suggested is, to endeavour to recollect yourself, make coolness a duty, and be less anxious and eager as to the result of your shot.

If a young sportsman who is troubled with the "nervous anxiety," were, before firing, to say to himself, as the late Charles Dickens makes one of his

characters say, "Steady, Ed'ard Cuttle steady!" and act accordingly, ten to one but he would soon find himself considerably improved.

But coolness and decision are difficult qualifications to teach, whether verbally or by book; they should both be inherent in the sportsman, or he must never hope or expect to become a "Dead Shot;" though, when perfectly free from tremor or excitement, he may shoot as well as the best shot in the land. Such a man, however, will seldom shoot two days alike.

Over-eagerness leads to nervousness and confusion, which not only incur danger, but assuredly discompose the young sportsman and prevent his killing at the most reasonable distances.

A steady hand, and firm but quiet nerve, are among the highest and most necessary qualifications of a good shot. If possessed by the sportsman, he is certain, with perseverance and practice, to become a Dead Shot.

Successful shooting gives ease to the nerves and confidence to the shooter; but the fear of not hitting, and the over-anxiety to kill, are the certain precursors to missing.

Nervous men generally find the greatest difficulty in keeping themselves free from excitement when a bird is coming directly towards them, or when the dog points and they are certain of a shot.

When a man is tremulous or excited, whether at

the noise or suddenness of birds springing from the ground, or otherwise, he makes an unsteady and different aim to that which he would make if free from tremor and excitement.

An excitable person cannot shoot well; or, at all events, only in his calm and calculating moments. In my own experience, I have always found such men downright *bad* shots. They are too hasty in every movement. No matter how near a bird gets up, the gun is instantly levelled at it, regardless of range, and generally the bird is missed.

Nervous men usually shoot best when by themselves. In presence of strangers they invariably shoot badly; some through the vexation and annoyance of being considered bad shots, of losing their reputation, or of being beaten by inferior sportsmen.

Feelings of envy and disappointment are sure to produce bad shooting. Some men when shooting become envious of their more successful companions; perhaps plodding, unpretending fellows, with cool and steady nerves, who seldom miss a fair shot; and who soon tot up a heavy bag, to the mortification of their envious and disappointed companions.

Most men shoot well or ill, according to the state of their nerves. One of the best shots I ever saw in the field, I one day met at a pigeon-shooting match, when, not being accustomed to pigeon-

shooting, to my astonishment he was in such an anxious and nervous state, that he was well beaten by young sportsmen of very ordinary pretensions.

When the nervous sportsman misses at fair range, it is either because his trigger-finger is not quick enough in obeying his aim, or because he makes a nervous twitch at the moment of pulling trigger, and so drops the muzzle of his gun just sufficient to miss his aim ; or, having got the right aim, he does not keep the gun moving as the bird moves, long enough to ensure the shot striking where he intends.

It is impossible to attach too much importance to the consideration of these matters ; the disregard of them is frequently the cause of missing a very fair shot ; for if the finger errs in any way, or fails to act in concert with the eye, the bird is inevitably missed. There must be no momentary pause : the flying object is rapidly moving : an imperceptible instant between the moment of true aim and that of drawing the trigger, causes a delay in the ignition of the powder ; and so the bird flies away unhurt, by reason of the shot flying below or behind it.

Nervousness is not a fault, but a failing, or rather a misfortune, particularly in one who is desirous of becoming a good shot.

If a man is naturally nervous, he seldom or never

shoots well ; particularly in the company of others. But if, possessing the other essential qualifications, he can get the better of the failing, there is no reason why he should not in the course of time shoot well.

Some who have attained high distinction in the art of shooting, have been more or less nervous in their early performances. So with cricket, and some other games of skill, nervousness is a great impediment to good play ; but as the player warms to the game he improves, because the discomposure abates ; and accordingly he plays with skill and precision : so with shooting, if the sportsman, possessing other good qualifications, finds that by practice he can overcome the nervous feeling, he never need despair of becoming a good, or even, a Dead Shot.

THE CARELESS SPORTSMAN.

“ A blooming youth, who had just passed the boy,
The father's only child and only joy,
As he intent designed the larks his prey,
Himself as sweet and innocent as they,
The fatal powder in the porch of death
Having in vain discharged its flash of breath,
The tender reasoner, curious to know
Whether the piece were really charged or no,
With mouth to mouth applied, began to blow.
A dreadful hiss ! for now the silent bane
Had bored a passage thro' the wizzing train,
The shot all rent his skull, and dashed around his brain !
Unguarded swains ! oh ! still remember this,
And to your shoulder close constrain the piece,
For lurking seeds of death unheard may hiss.”

MARKLAND.

The character of “ carelessness ” in the handling and use of the gun, is the very worst a sportsman can bear. It betokens an indifference to taking the life or the limbs of your nearest and dearest friend or companion.

A careless sportsman should be shunned, as a dangerous associate ; for he gives you frequent opportunities of looking down the barrels of his gun. The companionship of such a man should be avoided by all who value life and limb.

A skilful sportsman is never careless : on the contrary, he is always on his guard ; and therefore he is at all times a safe companion in the field ; for

whether his gun be at full-cock, half-cock, charged or uncharged, he never gives you a chance of looking down the barrels, nor the barrels a chance of depositing their contents in your body.

It is therefore of the highest importance to the young sportsman that he should, in his early training, thoroughly learn and practise the various safe and cautious modes of handling, carrying, and using his gun : and such are the only proper and correct ones. The oldest sportsmen declare these to be the primary lessons the tyro should learn, and the most essential rudiments in his instruction ; lest he should become a "Dead Shot" to some friend, relative, or companion, and so embitter for ever, with sorrow and remorse, the future years of his own life, to say nothing of the lasting grief of those who were nearest and dearest in relationship to his unfortunate victim.

The safety of life and limb of sportsmen and their companions, consists in habitual caution and circumspection in the handling and use of the gun.

The principal rule of safety is never to hold, carry, or place the gun in such a position that you, yourself, or any other person may for a single moment be exposed to the muzzle.

Therefore, before touching powder and shot, let the uninitiated youth who desires to become a sportsman, practise for several days or even weeks, as suggested in the early pages of this work, the

cautious, safe and proper handling, holding, carrying, and presenting of his gun; and after he has learnt those thoroughly, let his tutor rate him well every time he catches him off his guard, or with his gun in a dangerous, careless, or improper position.

Having well learnt the manipulation, let him practise with gun-caps upon the nipples of a muzzle-loader, aiming and snapping them off at objects far and near; and when his tutor thinks him entirely careful with his piece, and fully awake to the dangers of carelessness and the necessity for vigilance; then, and not till then, should he be allowed to use gunpowder. And when so far advanced, it becomes necessary that he should learn how to protect himself from danger, and guard against the many accidents to which he (as well as others) will be exposed from careless, negligent, or improper handling and use of the piece.

Let the careless sportsman remember, that if his gun should burst and be shattered to atoms, though he may, with money, get another; yet if his right hand happens to be blown off or shattered, all the money in the world, and all the surgical skill on earth, cannot give him such another hand. To his sorrow, it is lost for ever!

The young sportsman having imposed upon himself the strict observance of all the safe modes and positions of handling, carrying, and using the gun, it will, eventually, become more natural to him

to carry it in a safe position than in an unsafe one; and then, in the event of accidental or unintentional discharge, to his comfort and satisfaction it will do nobody any harm. Through life he must never under any circumstances forget, nor even fail to observe most strictly, the lessons he has learnt on the safe handling and carrying of his gun.

Any person who has been drinking freely should not touch a gun until sober; and a sportsman should not, under any persuasion, be induced to walk out, or even to remain in company with another who, with a loaded gun in his hands, is in the least degree the worse for liquor. The best plan is to take the gun from him unawares, and fire it off, or draw the cartridges.

Strong drink has been the cause of many fatal and lamentable accidents with firearms.

Never suffer a gun, whether loaded or unloaded, to be pointed *for a moment* towards any human being. A gun has often been found to be loaded, though the owner believed and asserted positively that it was not.

At the present day there is no excuse for the accidental explosion of a gun inside a house. Any man who neglects to remove the cartridges from the barrels of his breech-loader when putting the gun down inside a house, or who puts the cartridges in the barrel before getting outside, is guilty of unpardonable negligence, particularly if there be children

in the house, or other persons whose curiosity might induce them to meddle with the gun.

Always withdraw the cartridges from a breech-loader, and take the caps off the nipples of a muzzle-loader before getting into a vehicle, or riding or driving a horse with a gun in your possession.

A gun should never be laid by or put away loaded.

Beware of the danger attending the practice of drawing the shot from the barrel of a muzzle-loader, and of inverting the muzzle and tossing the charge into the hand whilst the caps remain on the nipples; the safer plan is to fire it off, if too indolent to remove the caps before drawing the charge.

Never put a cap on the nipples of a muzzle-loader, till the performance of loading is completed.

Never carry a gun with the hammers down on unexploded caps.

And remember, that it is in the moments of greatest excitement, joy, and forgetfulness, that accidents generally occur.

Never beat the bushes with your gun, nor poke it in a rabbit's burrow.

It would seem to be almost unnecessary to remind young sportsmen of the perils incurred through loading one barrel of a muzzle-loader whilst the other is loaded and capped, and the lock at full-cock: and yet in the hurry and excitement of sport, this has been a common occurrence with careless

sportsmen, and as a natural result, accidents have frequently happened in consequence, particularly with common locks; and also with good ones, if permitted to become foul, or if besmeared with impure oil.

If one barrel of a muzzle-loading gun be charged and capped, whilst loading the other, be sure to put the lock at half-cock. The safest locks are those which have patent stops for locking the hammer, and holding it in safety during the process of loading.

Accidents from loading the gun and drawing the charge are now reduced almost to a minimum in the hands of a cautious sportsman, by the invention of breech-loaders. The sportsman on reloading one or both barrels of the breech-loading gun, should, however, take care that the muzzle points upwards when the barrels are jerked or forced back, and secured to their place in the stock.

In cocking and uncocking a gun always keep the muzzle pointed upwards in the air. Accustom yourself to the practice, and it will then become a natural habit to you.

Accidents sometimes arise through dogs, in their eagerness and delight, jumping about and putting their fore-feet upon the sportsman whilst he has a loaded gun in his hands. Sporting dogs should never be allowed to jump or fawn with their fore-feet upon sportsmen; for if encouraged, or even

allowed to do so at any time, they will assuredly repeat it when they find they are going out with the sportsman in pursuit of game.

The reckless folly of dragging or pulling a gun through the hedge, muzzle first, is so glaring, that one would suppose none but a maniac would do such a thing, and yet one constantly hears of incautious sportsmen "accidentally" (?) shooting themselves or their companions in that way. And it is equally dangerous to hand a gun through the hedge to your companion on the other side unless the muzzle be kept uppermost.

A gun should always be held muzzle upwards on getting over and through hedges; and where this cannot be done, it should be carefully pushed on in front of the sportsman, with the muzzle pointing to the ground; and whilst getting through the hedge, the sportsman should constantly watch the direction in which the muzzle is pointing, and see that it is never towards man or dog.

Another common cause of accidents is, through inattention to the locks of the gun. If they become foul, or pull heavier than usual, they should immediately be looked to. The use of impure or common oil has often been the cause of accidents, through the oil forming corrosive substances on some parts of the lock.

Let the careless sportsman beware of the slightest incaution in the handling and use of his gun. Gun

accidents are always serious, and generally fatal. Let him remember, at all times and under all circumstances that he holds in his hand a life-taking weapon, which requires caution and vigilance in its manipulation and use, in order to guard against accidents to himself, his companions, beaters, and dogs.

GUN ACCIDENTS THROUGH BARREL BURSTING.

A gun, however sound the barrel, will burst on being fired, if the muzzle be stopped or plugged : as by mud, clay, snow, or other substance. The cause of which is, the confinement of the expanding gases, which on explosion of the powder, make their exit where the sudden pressure or resistance is first felt ; and that is, between the shot wadding and the obstruction : generally a few inches (according to circumstances) from the shot. The force of the gun-powder does not drive the obstruction out at the muzzle, because of the gases confined between the shot and the plugging substance at the muzzle.

The gases on receiving a sudden check, such as that caused by ignition of the charge of powder, cannot be driven out in a direct line ; but are of such immense power that they bulge the barrel, and burst it wherever sufficient pressure is first felt.

A fall in the field, or in getting over a fence, may cause the muzzle of the barrels to strike the ground

and plug them ; in which case the obstruction must be removed before firing the gun, or it will assuredly burst.

I have never had the misfortune to have a gun burst in my hands ; but many years ago I had a narrow escape from such an occurrence. Returning home from wild fowl shooting one day with a heavy string of wild-ducks and widgeon across my shoulder ; the time of tide being low-water. After getting out of my boat I had a slippery, sloping, clay-beach to walk up ; when thus heavily laden, and no help being at hand, I carried my gun, a heavy double-barrelled muzzle-loader at half-cock, under my left arm, both barrels being charged, and caps on the nipples, when I slipped and fell forwards ; the muzzles of the gun struck into the ground suddenly, and with considerable force, plugging both barrels to the depth of a foot or more with the clay. Fortunately the locks of my gun were of the safest and best manufacture, and in perfect condition ; otherwise the jar occasioned by the fall would, inevitably, have caused the gun to explode and burst, and the consequences must, in that case, have been serious, if not fatal, as I fell completely over the gun. I have always looked back upon my escape on that occasion with much thankfulness, and attribute it solely to the good quality of my gun locks, and the attention I always paid to them to keep them in good order.

A gun may also be burst by firing it off whilst the muzzle is thrust into the water.

Instances have also occurred of the barrels of muzzle-loading guns bursting or bulging on being fired when the shot-wadding has become loose and slipped up towards the muzzle. A thin wadding is more liable to do so than a thick one, owing to the weight of the shot pressing upon it when the gun is carried with the muzzle pointing downwards. So also from the jar occasioned on firing one barrel whilst the other is loaded, with a loose fitting shot wad. But with a tolerably thick elastic wad this danger is obviated.

Many are the hands and fingers that have been blown off in charging one barrel of a muzzle-loading gun whilst the other barrel remained at full-cock : and so also in drawing the charge of one barrel whilst the caps remained on the nipples.

And how frequent have been the accidents through the fatal error of loading the wrong barrel of a muzzle-loader, or putting one charge on the top of the other, instead of loading the empty barrel ! whereby the gun is almost certain to burst on discharge.

The remedy for mistakes in loading the wrong barrel of a muzzle-loader is exceedingly simple, if careless sportsmen would only observe it. Always make it an established rule, in charging one barrel whilst the other is loaded, to drop the ramrod into

the charged barrel, and leave it there on each occasion, whilst putting in the powder and shot.

An additional advantage gained by this suggested process is, that you find whether or no the wadding a-top of the undischarged barrel has moved by the jar occasioned to it in discharge of the other.

Some persons shoot half the day entirely with one barrel, whilst the other is charged; this should not be: because, repeated discharges of the one are apt to loosen the charge of the other barrel: and hence the greater necessity for the precaution suggested, of dropping the ramrod over the charge whilst reloading the empty barrel.

Such, however, are chiefly dangers of the past: as most sportsmen now use breech-loading guns, whereby all such risks may be entirely obviated.

THE FLIGHT OF GAME.

The flight of game is an element of very instructive consideration for the young sportsman, yet, strange to say, it is too frequently disregarded if not entirely overlooked.

Undoubtedly the sportsman who carefully studies and closely observes the flight of the objects of his gun, will shoot the better for his pains.³

A bird crossing at right angles from right to left, and *vice versâ*, sixty yards from the shooter, is

calculated to gain on an average two feet of space in flight, whilst the shot is travelling through the air; or, as it may be stated, between the interval of pressing the trigger and the arrival of the charge, sixty yards distant from the gun.

At fifty yards the space gained would be one-and-a-half foot; at forty yards about one foot; at thirty about half-a-foot; and so on, proportionably less as the distance decreases. But these calculations apply only to birds crossing at right angles; when other lines of flight are taken into calculation, such as rectilinear, oblique, and obtuse angles, the space is less.

The simple fact that at the moment of drawing the trigger, birds are sometimes moving faster from the visual line of aim than at others, by reason of the various angles or directions of their flight, is too often lost sight of; though to be certain of killing, the aim must be more or less in advance of the bird, according to the direction and swiftness of its flight; and also in accordance with the distance or range at the time of drawing the trigger.

Let any man consider, and ask himself how he can expect to kill if he fails to present his gun more or less in advance of the bird, according to the direction and the slowness or the swiftness of its flight? If he takes the same aim at all times, regardless of these considerations, it is impossible that he can kill any but chance shots.

The flight of game-birds, if carefully observed, will be found to vary considerably, not only with the species, but with the time of year. In the early part of the season it is steady and direct; late in the season, and when the birds become wilder, it is strong, rapid, and wary, requiring instant readiness, discrimination, and prompt judgment as to the allowance to be made in holding the gun more or less in advance.

The young sportsman should watch frequently and narrowly the flight of game-birds. Let him reflect as he observes their mode of flight, and the various lines or directions in which they fly. Let him do this even when he has no gun with him, observing the mode in which they rise from the ground, fly, and alight; the noise they make as they rise or fly, or their silence, as the case may be—all which are fitting subjects for the consideration and reflection of the sportsman who would become a “dead shot.”

YOUNG PARTRIDGES.

Partridges are hatched in the months of May and June, and dry warm weather is most favourable to the hatching.

It has been said that a season may be *too dry*, and that many young fledglings fall victims to the

drought. I am disposed to believe, however, that it is but very few who die from such causes. The heavy dews of morning and evening supply them with sufficient moisture, even should there be no neighbouring streamlet or wet ditch to which they can resort. It often occurs that in the hottest weather the dews are heaviest; and the birds are always astir at daybreak, sipping, with their tiny bills, the honey-dew that hangs on the lips of Nature's wild flowers, and on every leaf and blade of grass that graces the fields and meadows where they grow. Such, then, are the resources which Dame Nature provides for her feathered creatures in the perils of drought or a long, dry summer.

A wet hatching season is a great drawback to the successful rearing of young partridges; in proof of which, one has only to look at the fragile but exquisite form of the little fledglings when they have just cracked the egg-shell and come forth from the ovarial cot; for although endowed by nature with powers in advance of birds of many other species, such as those which build in trees and places above ground—inasmuch as the eyes of the latter are not opened till many days after being hatched, and they are unfledged and unfit to leave the nest until weeks afterwards when fully fledged, whereas young partridges, like chickens, ducks, and pheasants, have eyesight as soon as hatched, and are able to leave the nest and run about almost immediately after-

wards—they are nevertheless weak and puny little creatures. Take one of the tottering little things in your hand, and see how it reels and staggers, with scarcely strength to balance its downy little form upon those slender legs. Does it not look as if an April shower would drown it? And yet it is in the very nature of young partridges to aspire to activity from the very hour at which they are hatched—eager to run and draggle their little bodies through the wet grass and over the rough clods of the cornfields, as if impatient to discover the nature and extent of the world of green fields and hedgerows they have so recently entered; and so, whether the ground be wet or dry, and whether it be in rain or sunshine that the little creatures first venture beyond the threshold of the nest, a few hours after the brooding warmth of the mother's feathered breast has given them a little strength, away they start, toppling and tumbling over little clods of earth and stones, as if fearless of the roughest path, and unconscious of the perils they incur from the wet and sticky surface they persist in treading. The faint twitterings of their little tongues on every side create anxiety in the heart of the maternal bird as she responds and looks to one and the other of her tenderlings, and watches with restless eye their pretty movements, lest they should wander near the haunts of their avowed enemies—stoats, weasels, rats, and such like vermin—which are always on

the look out for helpless little beings of the kind, and greedy to make a meal of such tender morsels. But if they happen to be hatched in fine, sunshiny weather, the rapidity with which they gain strength and activity is astonishing. A week's warm sun upon the downy backs of newly-hatched partridges will generally make their rearing almost a matter of certainty; but a week's cold, wet, or rainy weather at such a time is almost certain destruction to two-thirds of every brood, unless, indeed, the soil is sandy, and a dry shelter be at hand. The maternal bird shows her anxiety to collect the little stragglers around her, and endeavours to shelter them from the cold and rain; but they are not always obedient, and some of them wander too far from maternal protection, and draggle about the wet fields until exhausted with cold and fatigue; and, in the absence of the sun or any other means of warmth, they sit down on the wet and sticky surface, where they perish in an hour!

A wet June is unfavourable for young partridges. The coveys are always found to be small after a wet hatching season; and, on the contrary, the coveys are usually large and strong if the season be dry and warm.

THE HAUNTS AND HABITS OF PARTRIDGES.

Every sportsman should have a fair knowledge of the haunts and habits of the objects of his pursuit, as such will often be found to contribute materially to his success.

In the month of September partridges frequent wheat and barley stubbles, from sunrise till about nine or ten o'clock in the morning; after which, if a fine day, they resort to turnip fields, vetches, and sunny banks and places, where they bask. About three or four o'clock in the afternoon they return to the stubbles, and remain there till sunset, when they go generally to the upper grass lands to roost, if any are near at hand; if not, they go to fallows, clover lays, or barley stubbles.

On wet or foggy days they generally remain all day long in the stubbles and driest fields they can find.

As a general rule, they prefer light land rather than heavy.

As the season advances, they become wary of the sportsman, and are less regular in their habits; but if there be low-lying grass lands or marshes in the neighbourhood, they are particularly fond of resorting there at mid-day, or whenever disturbed in the corn fields.

In November and later, they are so uncertain in

their movements after being disturbed, that the sportsman must rely very much on his own local experiences as to their habits, which at that time are regulated more or less by the nature of the country.

About mid-day, and from that till two o'clock, is generally a doubtful and uncertain time at which to find partridges. They go to the ditches and lowlands to drink about that time, in dry hot weather. At about three o'clock in the afternoon they run about again, particularly if a breeze springs up after a hot day.

In rainy weather, or when their feathers are wet, partridges never lie well.

Furze and fern, if interspersed here and there with green patches of grass, are, in some districts, likely places for partridges, particularly after being often disturbed elsewhere.

Small fields with high hedges are favourite resorts of partridges, particularly in the early part of the season.

Coveys of partridges may generally, during the month of September, be found in the early part of the day in the fields in which they have been hatched and reared. They appear to treat such fields as home quarters, and, if not too much disturbed, continue to retain their preference for that particular field or locality during the greater part of the season; and this, too, though their covey has been much thinned by the sportsman.

Partridges, as a rule, shew great likings to particular places; and there are upon every manor certain favourite haunts where they may usually be found, unless very much persecuted.

In the evening, just after sunset, the roost note of scattered partridges may be heard calling to their lost companions to assemble together for roosting, to which the others respond, and so the scattered birds of the covey get together again. They should never be shot at nor disturbed at that hour. It is the nature of partridges to keep to their broods, or coveys, and roost together on the ground at night; and for that purpose they fly or run towards the field or locality in which they were reared or brooded by the parent birds; but if anything suspicious, or giving cause for alarm, be detected in the evening in that particular field, they will adjourn to the next, giving preference to a field of stubble or fallow, or a meadow of dry short grass.

BEATING FOR GAME.

The term "beating" implies, in sporting phraseology, going in search or pursuit of game with dog and gun—sometimes with attendants called "beaters," who provide themselves with staves for disturbing and driving the game out of its hiding-place. A sportsman may be said to "beat" a field by

merely running his dog over it, or by walking over and about it in pursuit of game.

Beating for game, forms, unquestionably, a very important element in the young sportsman's training; and until he thoroughly understands it, he must not expect to make a heavy bag, particularly where game is not over-abundant. In order to fully appreciate its importance, the sportsman must know something of the haunts of the objects of his pursuit, and their habits at different times of the day; and where and how to find them, particularly after they have been disturbed two or three times in succession.

In the first place, a quiet, noiseless tread is essential at all times in beating for game in open country; but in thick coverts noise is sometimes encouraged.

Talking aloud, whether to your companions, beaters, or dogs, is fatal to all attempts to approach game in open country.

The necessity of observing strict silence, especially in partridge, grouse, wild-fowl, and snipe shooting, cannot be too deeply impressed on the minds of young sportsmen, many of whom, say what you will, insist on constantly directing their dogs by speaking or calling aloud to them; whereas the "dead shot" and "old sportsman" are silent, and direct their dogs entirely by waving the hand, and other such dumb signals.

Always endeavour to find your birds as early as possible on your beat—you have then sport before you at once; and a young sportsman is more likely to kill early in the day than when tired and fatigued after many hours' toil.

Beat your ground closely, more especially on the first part of your walk; and always remember that a bird which lies close is worth a whole covey that is wild.

The young sportsman may be assured that he will find it tends very much to his success to stick to one covey as long as he can, and never to leave the sport in hand for the idea that better may be found elsewhere. The more he knows of the accustomed haunts of the birds in any particular locality, the better will he be able to arrange his beat.

The oftener a bird is disturbed, the less will be the chance of bagging it, unless accurately marked down; because it becomes more and more alarmed, takes a longer flight than when first put up, and hides in a more improbable spot. An exception to this rule is that of the French partridge, which by being disturbed several times in succession, seems to lose its courage, becomes less capable of evading its pursuers, and finally affords the sportsman an excellent opportunity, by rising close at his feet, very near the spot at which it was marked down.

French partridges have such a propensity for

running before taking wing, that they become tired after being flushed three or four times.

Young sportsmen make a great omission in not beating fallow fields when engaged in the pursuit of partridge-shooting. They usually, on looking over the hedge and finding it fallow, pass it by without so much as running the dogs over it. So indifferent are some sportsmen about fallows, that their dogs become careless in their manner of hunting over them, and unless pressed, will be likely to leave the birds behind, in some remote corner of the field. Both sportsmen and dogs seem to think them, of all other fields, the most unlikely in which to find game; whereas they are, sometimes, of all others the most likely, particularly if late in the season. Fallow fields are to partridges favourite places of resort at all times, except in very wet weather. They delight to bask there on sunny days, and by reason of the colour of their feathers so closely resembling the ground, they probably feel themselves safer in such fields than elsewhere, being entirely invisible to human eye at sixty yards, if they remain motionless. Besides, too, fallow fields are the quietest resorts they can select: no cattle are grazing there, nor are there any labourers about them as in other fields; and if the enemy should happen to approach, the fallow field is so exposed and open, that he may be detected at a long distance; and then they sometimes droop

their heads and run along the ridges unobservedly, from one end of the field to the other. Generally, however, partridges lie very close in fallows, and afford excellent chances to the sportsman. Many and many are the partridges which an old sportsman kills in the season over the fallows, whilst the tyro seldom deigns to try them, beyond walking, with gun upon his shoulder, from one corner to the other just to make a short cut of it, and as if morally certain no sport can be had there; instead of which he ought to try them as cautiously as the stubbles.

To prove the utility of beating fallows, I will mention a circumstance which occurred a few years since. Whilst beating an old fallow, in company with a veteran sportsman, a "dead shot," a covey of ten partridges got up in front of us; and as all, or most of them, rose out of a deep furrow, they were in line with my friend's aim, and he killed, unintentionally, four with his first barrel and one with his second; and as I killed a brace with two barrels, we bagged seven birds out of the covey. Three only got away, and those we marked down and shot within a quarter of an hour afterwards. I am not aware that I ever, before or since, saw a whole covey of ten birds bagged in so short a time by two sportsmen. I have many times unintentionally killed two birds with each barrel, and now and then three; but on such occasions, when I have had a

young sportsman walking with me, who, although he fired both barrels, either killed nothing or only one bird, I have usually allowed him to claim the credit of a brace.

On another occasion, when shooting with a brother sportsman in a fallow field, a covey of seven birds rose in front of us; and as three got up out of a furrow, a long distance in front of me, I shot as they rose, and killed all three with my first barrel and another with my second, my friend killing one with his first and two with his second. Then, turning to the boy who carried the game bag, and looking sternly at him, with a view to testing his attention as a marker, we inquired if he marked those that flew away. "Yes, sir," said the 'cute lad; "I marked 'em all down, and so did you, for you've killed the whole covey!"

Suffice it to say, in regard to fallows, that partridges lie more constantly upon them than many sportsmen would suppose; and late in the season the fallows are the first places to which he should direct his steps. In a rough old fallow they often lie on the ground until almost trodden upon, such confidence have they in the cover afforded them by ridges of ploughed land, which is usually nearly identical in colour with the feathers on their backs.

The manner of beating a fallow is, to cross the ridges right and left, not up and down in the track of the plough. Birds cannot run fast across a rough.

fallow, and by beating it in the manner suggested, the sportsman will often find the birds lie as close as he could possibly desire.

Meadow and grass land are also too frequently passed over by young sportsmen, as if improbable places in which to find game; but as the season advances, they are among the most likely places in which to find partridges at mid-day, by which time they are in the habit of leaving the uplands and resorting to moister and cooler places; and so they get into meadows near the water, ditches, turnip-fields, and other like cool retreats.

Partridges lie so closely on well-grown grass lands, that the sportsman should beat such fields very carefully; and, on finding the birds, he may generally be assured of good sport, as they do not usually get up all at once out of grass cover, but singly. If a covey be dispersed in the morning, and driven into a grass field, they will sometimes lie so close that they will have to be driven up singly, within a few feet of the gun. I have, in company with a friend, many times, killed every bird in a covey in this manner.

When partridges have been much persecuted, they sometimes pitch in most unaccountable places, such as bye-lanes, orchards, and even public highways. Every sportsman of a few years' experience must often have been surprised at the strange places from which partridges sometimes spring during the latter part

of a day's shooting —perhaps close at his feet, and at a moment when he is least expecting to find them. It shows that he should always be upon his guard, for sometimes, when not in the least anticipating sport, he is the more likely to meet with it.

Newly-made plantations of young trees, where there is long grass at the bottom, are extremely favourable and likely resorts of partridges. They go in search of seeds and insects which are generally abundant there; and when the birds have been much persecuted during the morning, they are fond of hiding in such places.

It is a sound rule in partridge-shooting, that whenever a single bird is marked down with certainty, it should be searched for until found. By firmly adhering to this rule, more birds will be bagged in the end, time will be saved, and the dogs acquire a confidence in their master's apparently superior knowledge of the whereabouts of game.

When a sportsman has been unsuccessful in finding birds during the morning, and has traversed a wide extent of country which he knows to harbour several coveys, he cannot do better than "double beat"—*i.e.*, try the same ground over again, but more carefully, when, as an almost invariable rule, he finds plenty of sport. Facts of this sort seem, at first sight, difficult to account for, but experience proves the utility and reward of double beating.

I have known instances in which an old sports-

man has followed a young one over the same beat two hours later in the day and killed a good bag of game ; whilst the young one has killed only a brace or so, and stated, besides, that he saw “ only one covey.”

In beating for game the sportsman should always give his dogs the benefit of the wind, if ever so soft an air, by entering upon his beat from a leeward-most quarter, and working each field up wind or by a side wind, either of which is favourable to the dogs and the success of the shooter.

In foggy weather, partridges lie close and do not run about much ; they are then apt to be passed over unless the sportsman tries his ground carefully.

In hilly countries, whether in pursuit of partridges, grouse, pheasants, or woodcocks, always beat the hills first, in order to find the game ; then mark them down into the nether-lands and go and kill them.

PARTRIDGE-SHOOTING.

“To-morrow’s the first of September.
Get ready the dogs and the gun,
And be sure you don’t fail to remember
The whisky-flask marked ‘number one.’
And, boy, above all don’t be sleeping
When rises the bright star of day,
For soon as gay morning is peeping
We’ll haste to the stubbles away.
 To the stubbles away, away, away,
 To the stubbles away, let’s away !”

BRANDRETH.

In the early part of the season, partridge shooting is by no means difficult. A young sportsman of mere ordinary pretensions may make a fair bag in the course of the day, where birds are tolerably plentiful.

Whilst partridges are young and immature, they have not the strength of wing and power of flight to enable them to offer any other than easy shots to the sportsman ; but after they are full grown and full feathered, and have become strong on the wing, and wild through the persecution to which they are usually subjected, then the vexation and disappointment of young sportsmen commence, and they complain of the difficulty they experience in hitting the objects of their aim. The birds, having become wary and suspicious, will not allow the pointer to approach within thirty yards or more before they rise up in the air, perpendicularly, with startling



IN THE STUBBLES.

suddenness ; and then dart off with powerful flight, borne on swifter wings, and urged through fear and haste to flee the suspected danger. Then it is that the young sportsman's skill is truly tested ; shooting then becomes a most interesting art ; and not one, nor two, nor even three seasons will suffice to make him a " dead shot," without good instruction, close observation, and a careful study of the theory and practice of the art.

As to the best time of day for Partridge shooting.— In the early part of the season many sportsmen commence at daybreak ; in which case if the weather be sultry, they should leave off shooting at midday, say from 11 o'clock till 3, or 3.30 ; by so doing it will generally be found that they make a heavier bag than if they kept on toiling all through the heat of the day, when there is no scent for the dogs, and when it distresses them and fatigues the sportsmen to very little purpose.

In cool weather, and later in the season, there is sometimes good scent and good sport all day long : it will then be more prudent to defer shooting until about 9 o'clock in the morning.

In the months of November, December, and January, the mid-hours of the day are the best times for partridge shooting.

It is not advisable to prolong the shooting a moment after sunset, particularly during the months of September and October.

It breaks the haunts of the birds and makes them very wild, to shoot at them after sunset, and it is, besides, the certain means of driving them away to your neighbour.*

From three to half-past five, during the early part of the season, is sometimes the best time of day for filling the game bag. The birds are then much scattered, and are running about in search of food.

As a general rule, the afternoon shooting is considerably better than that between half-past eleven and two; though from nine to eleven in the morning is a favourable time, much, however, depends on the time of year, the state of the weather, the scent, and still more on the sportsman's mode of beating.

When shot at in early season, partridges fly to turnip and mangel-wurzel fields, if near at hand.

After heavy rains have subsided and the turnip tops become dry again, birds lie very close on being driven into a turnip field.

In damp or cloudy weather, the scent is always strong and good; but in dry or hot weather it is feeble and bad. Just before and after rain it is invariably strong. In very windy weather it is uncertain. During white frosts it is generally good, but in hard dry frosts, with east wind, the scent is feeble.

Always give a dog the benefit of the wind; that

* See reasons and observations as to this, *supra*, p. 151.

is, hunt him towards the wind, not with it. By this means the dog will be enabled to find more game, and the birds will lie better.

The young sportsman will find that birds lie very much better if he can "head" them: that is, judiciously place himself in such a position that they lie between himself and the dog. This manœuvre is not always practicable, but when it is so, and the birds are wild, he will find the advantage of it. But do not attempt to "head" your game too often, as they may be running: and never do so except with a steady old dog that is "up to the dodge."

It improves the hand, the nerve, the confidence, and consequently the shooting, to use the gun freely: do not pick or spare the shots if you wish to become a "dead shot." Many persons, through fear of being taken for "muffs," wait for good chances: and, as these are always few and far between, where game is scarce, an inferior shot, by banging oftener, and at doubtful chances, beats the better shot, who makes a too careful selection.

It should, however, be observed that there is a difference between using the gun freely, and firing indiscriminately at every head of game that rises, regardless of distances and improbabilities.

If the mind becomes agitated on the sudden appearance of game, the sportsman so affected cannot shoot with accuracy. Partridges on rising sud-

denly make a great "whirr" with their wings, which sometimes discomposes the nerves of young sportsmen and causes them to miss their aim.

At an advanced period of the season every bird is watchful as a sentry, and extremely suspicious of the approach of man or dog: then, to my mind, the sport of partridge-shooting is sport indeed: and a brace of birds bagged in those days is worth two brace of September birds.

Even in November and December, in parts of the country where partridges are not too frequently disturbed, nor much persecuted, they will lie well in fine weather. It is the frequency of the visits of the sportsman, and the thunder of his artillery that make them wild.

The number of birds bagged by an indifferent shot at an advanced period of the season, is always very few; particularly in a country where game is not over abundant.

The best skill of the best shots is required in partridge-shooting, when the season is far advanced and the birds have become truly wild: for then, both with skill and experience combined, the sportsman often fails to make a satisfactory bag.

When partridges are very wild, the sportsman should be doubly vigilant, and ready to fire within a moment of their rising from the ground. When they rise at long range, he should shoot whilst they are rising, and before they are well on the wing.

By so doing, the chances of killing are very much in his favour if he shoots high enough ; because the birds look larger, and are more exposed to the effects of the shot, by reason of their feathers being ‘all abroad,’ and the vulnerable parts exposed : besides, too, the shot strikes with double force whilst the bird meets it on rising in the air, to what it does when the shot overtakes it flying swiftly away.

When partridges are wild, if you expect to make a double shot, and bag a brace out of the covey, you must be very quick with your first shot. Killing double shots in style when birds are wild, is one of the most distinguishing features of good shooting.

It is the practice with some people in partridge-shooting, as soon as the birds become wild, to dispense with the services of pointers and setters, and to use a retriever only : a practice which answers tolerably well with shooting parties composed of three or four persons walking in line over every field at about twenty yards apart (more or less according to the growth or nature of the stubble or other cover), and doubling backwards and forwards if a large field ; and so, beating closely every enclosure. But it is laborious work, necessitating much walking and continual watchfulness ; as the game starts and rises without any warning to the sportsman ; and withal, close-lying birds are sometimes passed over.

The reasons given for this mode of beating are several: in the first place, partridges will not lie well to dogs after the first few weeks of the season; and that dogs put up the birds in dry weather when the scent is feeble; and further, that in turnips, potato, and other well-grown root-crops, dogs, by leaping over every ridge and bustling about the tops, put up more birds than they find; and generally speaking, the effluvia of white turnips mar the scent of the game, and so the dogs are unable to find it.

For partridge-shooting in high-grown turnips, a couple of Clumber Spaniels carefully trained to the pursuit, to be mute, and to range close (*i.e.* not more than twenty or thirty yards from the gun), are to be preferred to pointers and setters, as the spaniels will procure the sportsman more shots than the others. Pointers and Setters carry their noses above the turnips, leaping over them, disturbing the birds, and putting them up far out of range without finding them: whereas the spaniels, by keeping their noses close to the ground and running under the leaves of the turnips, in the track of the birds, are sure to find and put them up.

In the early part of the season, however, the turnips are not usually high-grown; and the birds then lie so well as to permit the dog to approach them very closely.

Partridge-shooting is not now what it used to be in the days of the sickle, when stubbles knee-deep could be trodden on every farm, affording the best and favourite cover for the partridge.

But now-a-days the scythe and the mowing-machine make a clean sweep of the stubbles; and improved husbandry leaves no cover for the birds, except in the turnip, mangel, potato, and other root-cropped fields; besides too, hedges are removed to make more room for agricultural pursuits, small fields are thrown open to large ones, and the few hedges that are left are trimmed down as closely as possible. No wonder then that the birds soon become restless, wary, and unapproachable in such unsheltered country.

The proper sized shot for partridge-shooting in the early part of the season, are those known as No. 8. At the latter part of the season, when the birds are wild and strong, never use larger than No. 6, and those only, unless the gun be of large calibre, as No. 12 or 13. Increase your charge of powder if the gun will bear it; but take care not to load with too heavy a charge of shot.

The *distinguishing marks and tests by which young partridges may be known from old ones* are these: In young birds the bill is brown, and the legs of a dusky yellow: in old birds the bill and legs are of a bluish white, the legs being a shade darker than the bill.

Another test is that of suspending the bird by the lower mandible of its bill, holding it between the finger and thumb; if the mandible bends, it is a young bird; but if the weight of the bird's body fails to bend the mandible, it is an old one. These tests, however, like all others, cannot generally be depended on after the month of November; because the young ones for the most part have, by that time, attained a nearly precise similarity to the parent birds.

It is indispensably necessary, in order to keep up a stock of partridges, that the *vermin should be destroyed*. Every stoat, weasel, polecat, rat, hedgehog, hawk, magpie, raven, jay, and other destructive creature, should be killed whenever seen on the estate; and their nests and young searched for and destroyed. If a manor be watched ever so strictly, unless the vermin are kept down, there will be no stock of game. Consider for a moment if there be only seven weasels on a manor; and at the most moderate calculation, if each weasel kills only one head of game in each week throughout the year; that is 365 head of game per annum, to the account of weasels alone! and others might be estimated in like proportion; to say nothing of the tenfold mischief during the season of incubation, when partridges and pheasants are seized by these blood-suckers whilst sitting on their eggs.

COVEYS OF PARTRIDGES.

Young sportsmen, in their eagerness to fill the game-bag, are too often guilty of the wanton and unpardonable indiscretion of firing into a covey of partridges without aim at any one bird; feeling certain of killing two or three at the least, but very often killing none, though wounding several. Such an indiscriminate proceeding, I need scarcely say, is as unsportsmanlike and injudicious, as it is cruel and unsatisfactory in its results. It is the central shots of the charge which are the effective ones; and they cover only so small a space in the air, that in the absence of deliberate aim, the chances are more than two or three to one against killing any out of a covey of ten or fifteen, unless they happen to rise 'all in a heap,' which is seldom.

And, as young sportsmen generally fire too soon, forgetting that the shot is more effective at a fair distance, than if either too near or too far; the fact, that the whole covey often flies away, notwithstanding that both barrels have been fired into it, is thus easily to be accounted for.

The sportsman should always endeavour to pick out the old birds of the covey, particularly in early season, when they are readily distinguished from the young ones by their larger size, and by their being the first to rise. The young birds of the

covey do not so soon become wild and cunning, if deprived of their leaders.

On a covey of partridges rising in front of the shooter, he should not fire at the nearest of the covey with his first barrel, but rather select, as the object of his aim, the farthest or leading bird; he will then have plenty of time to choose his second shot. The sportsman shows good judgment in reserving a near bird for his second barrel.

It is discreditable to a sportsman to shoot more than one bird at a time with each barrel; unless by chance another crosses the one he aims at, just at the moment of pulling trigger; or, as sometimes happens, when two or three get up in line out of a furrow.

Having selected one of the leading birds of the covey as the object of your aim, keep your eye upon it until it falls to your shot; and though forty others rise in front of you, do not allow your attention to be diverted towards them, until you have killed the bird you purpose shooting; if you miss it, fire the second barrel at the same bird, lest it should go away wounded.

In course of time (though books may fail to make the impression) the young sportsman will find from experience, that in order to make sure of bagging any at all out of a covey, he must fix his eye steadily and deliberately on one bird at a time; and the instant that one falls to his first barrel, fix the eye

on another, and with the same deliberate steadiness repeated, the other falls to his second barrel, and so he bags a brace with certainty.

If a covey be lost in the month of September, the sportsman may be assured it is not far off, but lies close, and very probably he has overrun it.

Dispersed Coveys.—One of the best aids to success in making up a good bag in a country where game is scarce, is that of dispersing a covey; and then carefully marking the birds down, and flushing them singly.

The manner in which a covey may be dispersed is this:—When the dog stands, walk round in an extensive circle, and then advance in the face of the dog, the birds lying between; when they rise, some will fly in one direction and some in another, and sometimes almost every bird will take a separate route. The experiment, however, is not always successful, particularly when the birds are wild, though at other times it is easy enough. It should never be attempted with any but an old or very steady dog.

Instinct teaches partridges to disperse for their own safety, when they have been shot at two or three times in succession.

If you succeed in dispersing the covey, you will find it necessary to beat for them very closely: dispersed birds lie ‘like stones on the ground,’ to use a common phrase; and in general they do not run

or move after alighting, but drop, as it were, into a hiding-place; so that the dogs are unable to wind them, except by passing within a few inches of their retreat.

Whenever you know to a tolerable certainty where a bird has pitched, encourage your dog to search for and find it, and never allow him to leave the spot until he has found it. This gives the dog confidence in his master's supposed superior powers of scenting, or knowledge of the whereabouts of game; and he will hunt the more willingly and sagaciously for such a master.

A dispersed covey affords the partridge-shooter the finest sport he can wish for; particularly among tufts of long coarse grass, fern, rushes, or some such cover, into which the birds pitch and squat until fairly kicked out, whilst the dog stands pointing in the most firm and interesting manner; and often the bird is within a few inches of the animal's nose.

The mistake of young sportsmen at these, the easiest shots he can possibly hope for, is, that he shoots too soon; and so, either misses the bird entirely, or cuts it all to pieces,

“Spite of the rules of art he must let fly,
In one of two extremes—too far or else too nigh.”

There are certain peculiarities belonging to dispersed coveys, which it is important to the young

sportsman to notice. If the covey be dispersed in the month of October, they generally squat several hours in their lurking-place, if undisturbed; but they will not lie so long in the month of September; and in wet weather they squat only a very short time, and sometimes commence piping to their mates after having squatted a few minutes.

When dispersed at mid-day, or during hot weather, they are likely to lie quietly in their places of concealment several hours; particularly if they have chosen the long cool grass of a fen or meadow; it is therefore necessary under such circumstances, to search longer and to beat closer for them on those occasions.

If the covey be dispersed early in the morning, it will assuredly re-assemble within a short time; and the same if dispersed late in the evening.

When closely pursued and often disturbed, Partridges sometimes drop into the most improbable places. Many a good stray shot is unexpectedly made in this manner, at some straggler which has deserted the covey.

THE FLIGHT OF PARTRIDGES.

The partridge is one of the most powerful birds on wing, of any that exists among the game species. With wonderful rapidity, consequently wonderful

power, it rises perpendicularly from the ground into the air, on being suddenly disturbed, particularly when in small fields with high fences. Whatever the height of the fence, if within fifty yards of it, the partridge, on sudden alarm, rises as high or higher than the top, at its first spring from the ground.

As the season advances partridges rise wilder, higher, swifter, and more suddenly. But in large fields, with low fences, they do not rise so high on being disturbed, unless their fright and alarm are very great.

The steadiest flight of partridges is in the morning before ten o'clock. On first finding them previously to that hour, they usually rise quietly, steadily, and sometimes sluggishly: the young sportsman should be prepared—it is his best chance.

Their longest and wildest flight is made on being disturbed between the hours of twelve and two in the day: particularly if twice or thrice within an hour.

Their swiftest flight, and that at which it is most difficult to kill them, is when fleeing from the fright of having been shot at; and also when flying down wind.

When disturbed on the slope of a hill or mountain, they do not rise up so perpendicularly as when flushed on level ground.

With reference to the various allowances of aim, to be made for variety and speed of flight, regard must always be had to the line or direction in which the bird is flying : for instance, the greatest allowance of all must be made for a bird crossing at right angles to the right or left. The reader will understand that by greatest allowance I mean, the aim must be more *in advance* of the bird for such shots than for any others.

Whilst taking these calculations into consideration the young sportsman must remember, that although a bird may be killed, almost with certainty at fifty yards, on crossing at right angles from right to left, and *vice versâ* ; yet the bird could not be killed at that distance with the same certainty if flying straight from the sportsman, though more than half the shot should actually strike it : the reason is obvious ; in the one case the shot, in its progress, encounters a firm object at a right angle : or, as it may be said, force meets force, as the bird flies into the shot ; in the other case it is a race between the shot and the bird ; and though the shot assuredly overtakes the bird, its forcé, after travelling fifty yards through the air, is materially weakened, and by reason of both substances moving rapidly in the same direction, it strikes feebly, almost harmlessly, sometimes scarcely penetrating the skin, particularly if the flight of the bird was very rapid.

The flight of the partridge, as of other birds, is

considerably increased in swiftness by a strong wind when the bird moves with it: and, on the other hand, the flight is sometimes very much impeded when the bird flies against the wind: the sportsman must therefore present and aim accordingly.

The extent of the flight of a covey of partridges on being flushed, varies very much, as regards distance, according to the country in which they dwell. In level countries they seldom fly very far on being disturbed: but in hilly countries they sometimes fly unaccountable distances, particularly in the latter part of the season.

If once they acquire the habit of taking long flights, they are sure to repeat it on being much disturbed. In some places you may often have a mile or more to walk before reaching them again; and if game is scarce, sport, in such case, is more a toil than a pleasure.

PARTRIDGE DRIVING.

The pursuit of partridge driving is now much practised in some localities during the latter part of the season, when the birds have become very wild; particularly if the fields are large, and barren of ground cover of any kind. A hilly, or undulating country is best suited to the sport.

The *modus operandi* is nearly identical with that

of grouse-driving (*infra*, page 199). The arrangements and equipments of the drive, with the mode of beating, are the same as in grouse-driving, or as nearly so as the nature of the ground and other circumstances will admit. And similar precautions on the part of the sportsmen as to keeping out of sight behind the batteries, and preserving strict silence, must be observed.

Skill and dexterity of the highest order are required at the hands of the sportsman who would hit with precision either driven partridges or driven grouse.

Both the one and the other when passing at full flight, whether high or low, go at a very rapid pace, so that the greatest possible smartness and precision are requisite at the hands of the sportsman. And with both combined, the chances of bagging a brace as they pass overhead, or to right or left in such rapid flight, are but momentary. The very critical instant must be seized upon, or the chance is gone. It is, unquestionably, sharp shooting and smart practice, particularly in windy weather. Slow or inexperienced hands can rarely hit single birds under such circumstances; they usually allow them to pass out of range before the gun is brought to the shoulder. The best skill of the most practised sportsman is sometimes taxed to the utmost to bring down a bird with each barrel. Successful shooting at driven partridges, or grouse, is a true test of skill and dexterity in the use of the gun.

Partridge driving is sometimes pursued with the object of driving the birds into large turnip fields or other close ground cover, when, having succeeded in so doing, the sportsmen beat the field in line, without the aid of pointers or setters. This mode of driving, however, seldom succeeds except where there is an extensive acreage of root crops, or other good ground cover. But where there is such, it is seldom necessary to resort to any other mode of driving.

THE ARTIFICIAL KITE.

Amongst the various modern contrivances for aiding the sportsman in his pursuits, particularly that of partridge shooting when the birds are wild, is the lawn (or paper) kite, made to resemble a hawk hovering in the air, when flown over the fields with kite-string, as a boy flies his kite: the object being to delude and terrify the birds, and so cause them to lie close, in order that the sportsman may approach within range. The kite (or artificial hawk, as it may be termed) usually answers tolerably well just at first, whilst novel to the birds; but they soon become accustomed to the fraud, and set the artificial kite at defiance, disregarding alike its hovering motion as well as its threatening attitude.

TOWERING BIRDS.

The "towering" of a shot bird is one of those curious and interesting phenomena which, though singular to behold, is puzzling alike to the sportsman and naturalist.

Towering is the last gasp or death-struggle of a dying bird, when mortally wounded in some particular part; though the precise nature and locality of the wound which affects the bird so remarkably as to cause it to make such an extraordinary and beautiful effort in its dying moments, has never been ascertained with sufficient certainty to satisfy the curious inquirer. It is of frequent occurrence in the field, as every sportsman knows; and it happens alike to birds of every kind when hit in the same manner.

It occurs in this way:—The bird, after being mortally wounded, flies two or three hundred yards in a horizontal line; and then, by a sudden effort and peculiar flutter of its wings, combined with a strong muscular exertion made in its dying moments, darts up in the air, several yards, apparently in a true perpendicular line, with its neck extended, beak pointed upwards, and wings drooping at its side; when, being dead, it falls as a stone to the ground.

There is no motion of the bird's wings as it rises perpendicularly; having gained an impetus by the peculiar, but desperate flutter before referred to,

the position it takes in towering is precisely that of a dead bird when suspended by its beak ; with the exception only, that the feet do not hang down, but are drawn up close to the breast.

It has often been the subject of discussion and speculation among sportsmen and naturalists as to what it is that causes a bird to tower ; or rather, in what particular part the bird receives its mortal wound, so as to cause it to perform so pretty and interesting an evolution in the air.

Some say it only occurs when the bird receives a shot in the head or brain ; others affirm that it arises from a shot going through the liver ; others from a wound in the spine : but without asserting anything positive upon so truly scientific an inquiry, I am disposed to think it arises from a mortal wound in one of the main arteries of the heart, causing the vein to burst, and fill the throat with blood, and so producing asphyxia. The throat and beak of birds which in my experience have fallen dead after towering, I have generally found full of blood.

When birds are struck by a shot in the eyes, and half or wholly blinded, they sometimes hover and twist about in a very grotesque manner ; or soar up high in the air, and then fall to the ground with wings extended, and not unfrequently head foremost ; but that is not towering ; a towering bird dies in the air : it is only in its death-struggle that

a bird actually towers; and when it does so, it assuredly falls to the ground dead.

I have seen wounded wild-fowl which I have shot on the water, swim round and round in small circles, as if in great bewilderment; and on capturing them have found them blinded in one or both eyes, and bleeding from the head and eyes, with no other wound about them; a single shot having struck the bird in the eye and gone through or into its head. But birds so struck do not tower.

I have sometimes seen wounded partridges and grouse soar very high in the air, as if in imitation of the act of towering, and then fall to the ground, but not head foremost; nor have they risen up in the air in that true perpendicular line which the towering bird takes, nor have they always fallen lifeless: on the contrary, I have occasionally seen such birds get up again and fly away. But this is not towering. The true towering of a dying bird is a very interesting sight, and no one who has ever seen it would mistake it for the mock tower of a bird that is merely wounded.

Whenever a bird towers, in the strict sense of the word, it falls to the ground *dead*; and is usually found lying on its back.

Towering birds are sometimes difficult to find; particularly if they fly across a field or two before towering, which is often the case. There being no trail to help the dogs, except at the exact spot

where the bird falls, the retrieving a towered bird depends almost entirely on the accurate marking of the sportsman or his attendants.

As a reliable and invariable rule, a towered bird never falls so far off as it appears to do to the human eye.

FRENCH PARTRIDGES.

Very little has been written on the subject of shooting the red-legged or French partridge. The reason is, probably, that but few of the authors of books on shooting have been accustomed to them. Indeed, most of the English counties are entirely free of the nuisance of French partridges, though it is matter of regret that they are nearly as numerous in some parts of Essex, Norfolk, and Suffolk, as English partridges.

It appears that French partridges were first introduced to this country by the last Earl of Rochford, on his estate in Essex, at a time when he resided a good deal at his favourite residence, St. Osyth Priory, in that county. They are also said to have been introduced by a former Marquis of Hertford, upon his estate in Suffolk. Both of these noblemen are said to have imported hundreds of the eggs, as well as large numbers of the birds, which were distributed over their estates; and so in the course

of a few years they became very numerous. A former Duke of Northumberland is also said to have hatched and preserved them on one of his estates.

The favourite haunts of French partridges are hills and fallows; and in winter, they often take refuge in woods and [thick-set hedges, particularly when closely pursued, or when the snow lies thickly upon the ground.

In the west of England there are none, or at least they are among the *rara avis* tribe. It is probable that this may not be the case many years longer, as they are apparently increasing in numbers; and are gradually creeping into neighbouring counties. Those who wish to be rid of them should destroy their nests in spring, and kill the old birds during deep snows, when they are unable to run, and when they hide in the hedge-rows and neighbouring woods.

A wet egging season is even more unfavourable to the hatching of French partridges than of English ones. The French birds will not sit long on their eggs in wet weather, if exposed to the rain, for though bold and pugnacious in their nature, they appear to lack the courage or endurance of English birds, in facing cold and wet in spring time; and so they forsake their eggs, and take shelter in the hedges.

French partridges are of a pugnacious disposition,

and fight the English birds whenever they meet them ; particularly the cock birds in the spring of the year : and as the French birds are larger and heavier than the others, they undoubtedly gain the mastery, and so the English endeavour to keep away from them. The two species are never found associating in each other's company, but a French bird will sometimes drive an English sitting-bird off its nest.

At the present day, French partridges are looked upon by almost every sportsman as a nuisance ; and their flesh, though whiter and more pheasant-like in appearance, is inferior in flavour to that of the English partridge.

If, on entering a field, the dog stands at a covey of French partridges, the sportsman may be assured they will run some distance before getting up ; probably across the field to the farther end, and then rise a long way out of range ; and so they spoil the dog, make him unsteady, eager and doubtful with English birds, which would otherwise lie well, but the dog, fancying they are going to run like French birds, across the field, in his attempts to follow them, puts them up before the sportsman approaches. French birds are always reluctant to fly until they have run a long distance, sometimes across two or three fields ; and it is only by outwitting them or by a familiar acquaintance with their habits, that the sportsman can get a shot at them. Often when you think they have all left the

field, they get up one at a time near the fence, close by you, behind you and everywhere but where you expect to see them ; rising as noiselessly as possible, and very different to English partridges, which generally give a startling warning when they get up, such as may be heard across the whole field, or farther.

French partridges never lie well to the sportsman in the fields ; they baffle both the cunning of the dogs and the skill of the shooter, especially any one unaccustomed to their habits.

The sportsman and his dog no sooner enter a field in which a covey of French partridges are lying, and begin to beat it at one end, than the Frenchmen may be seen at the other end, getting up singly, in the most provoking manner, and topping the fences as glibly and noiselessly as their cunning will permit them. The fact is, that they scatter themselves directly danger threatens, and run at an astonishing pace towards the fences at the far end of the field : and this artifice they repeat from field to field, leading the sportsman who is bold enough to pursue them, a fruitless chase ; more so in fact than a "wild-goose chase." The sportsman's only chance, on such occasions, is at single birds, from a scattered covey, which may happen to hide in a ditch or hedge that is too thick for free running. But the worst of all is, that these birds unsettle the English partridges, which, but for the

French, would lie well: and so they spoil what would otherwise be good sport.

When much persecuted, French partridges soon give in; probably they run so much when pursued that they tire themselves; and so, a bold start often ends in a cowardly resignation, by the bird hiding in a ditch.

*Special Instructions for Shooting French
Partridges.*

Having given an outline of the nature and habits of French partridges, I will now proceed to advise the young sportsman as to the best mode of shooting them.

In the early part of the shooting season, young French birds may be killed with the same facility as English partridges; but, on arriving at maturity, they inherit all the cunning of the old birds; and unless they can be driven into clover-seed, thick stubble, long grass, or some such cover, where they cannot run either fast or far, they are difficult to get at. In mangold wurtzel and turnips, they will run across the field, in the furrows, just as quickly as if it were a barren plain.

The best plan is, as the season advances, for two or more sportsmen to go together in pursuit of French partridges; and enter the field at the same time, but in opposite directions, one at each end,

and both walking towards the centre of the field in line with the furrows, not across them; this plan generally succeeds, because the birds by running along the furrows from one sportsman encounter the other; and very often, both obtain good shots, and thoroughly disperse the covey. The scheme answers best on marking a covey into a field of turnips or beet-root, or any other good ground cover.

But young sportsmen must be cautious not to shoot each other, nor to fire in any direction towards his companion, who may be approaching from an opposite direction; and never attempt this manœuvre in a hilly field, nor on any but open ground, where each sportsman can see the other all the while.

There is one branch of the sport of French partridge-shooting, which affords splendid practice, and that is, when the snow lies thickly on the ground in new-fallen flakes. At such a time these birds are entirely at the mercy of the sportsman; they cannot run far in the snow, consequently are deprived of the very means of using their cunning, and they hide in the fences, where they may be easily tracked, turned out, and shot.

The proper way is for two sportsmen to walk quietly, one on each side the fence, with a couple of dogs and beaters; the birds are then put up directly in front of the sportsmen; each of whom confines his shooting to his own side of the fence.

French partridges may be driven out in this manner, and killed with certainty, by the most ordinary shot.

If you have no companion, take the windward side of the hedge and send your dog to leeward, so as to give him the better chance of scenting the birds and driving them out on your side.

If having a companion you have choice of sides, take the windward side ; and the chances are that you will get double the number of shots by so doing : because the dog winds the birds from the leeward side and puts them out on the other.

An experienced sportsman will sometimes kill as many in a good deep snow, as on the first day of the shooting season : and many sportsmen prefer the winter sport to the best day in the whole month of September : it is, truly, fine practice where the birds are numerous ; and no matter how wild they have previously been, the snow so completely tames and deprives them of the use of their legs, that they fall easy victims. Try nothing but the fences and small copses ; and take care to mark those down which fly away.

The sportsman always rejoices at the victory which a heavy fall of snow enables him to make over these troublesome birds.

He should take care to be out on an expedition of the kind early in the morning ; and the birds are sure to be found in the fences. If he is desirous

of exterminating the race of French partridges on his estate, a week's continuation of deep snows will afford him every opportunity of so doing: the previously wild and unapproachable species can be advanced upon as they skulk in the fences, and may be driven out at the sportsman's feet; they are thus entirely at his mercy, if he be only a tolerable shot, for they are deprived of the very secret of their cunning and means of evasion, which lie entirely in their legs.

The sportsman should spare his English birds in deep snows, if he wishes to preserve them; and keep down the race of the French.

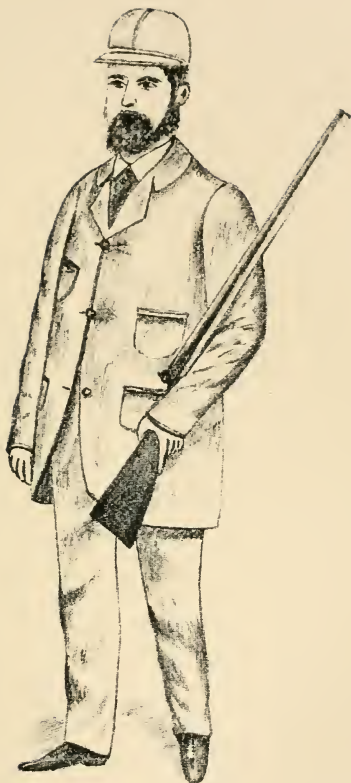
In November and December when the root crops are off the fields, French partridges congregate in large coveys on the fallows: then is the time to pursue them by the "driving" system; but they are not so easy to manage for the "drive" as English birds. With a little manœuvring, however, and a judicious plant of guns, they may be driven over the heads of the hidden sportsmen, and killed by skilful shots; but they are birds of swift and powerful flight when driven, and require hard hitting, with considerable dexterity in the manipulation of the gun.

GROUSE-SHOOTING :

WITH OBSERVATIONS ON THE HAUNTS AND HABITS OF GROUSE.

Grouse-shooting is one of the most attractive of all our recreations with dog and gun ; at the same time it is an exceedingly laborious one, on any other than well-stocked moors ; and, happily for those who possess them, there are many moors in Scotland where grouse are as abundant in the month of August, as partridges on a well-preserved manor in England in the month of September. It is matter of regret, however, that there are too in Scotland, many hundreds of acres of heather where the familiar note of the grouse is seldom heard, and where the weary sportsman may toil in vain for sport ; for alas ! the moor is nearly barren of the attractive objects of his search. The poachers have so many devices for taking grouse, and cheap guns are so readily obtainable, that where there are no vigilant game-keepers, the poachers skim the moor and take the cream of the sport before the English sportsman arrives.

There are many circumstances that are calculated to inspire a greater love for grouse-shooting, in the breasts of some sportsmen, than for either of the sister sports of partridge and pheasant shooting. In the first place it is the earliest sport of the season with dog and gun, and affords an oppor-



ON THE MOOR.

tunity, during a sultry time of the year, of enjoying amidst lovely scenery the cooling breezes of the Highlands and the fresh mountain air.

Grouse-shooting, when good, is unquestionably fine sport and fine exercise. It is essential, however, that he who pursues it energetically should be not only a skilful shot and keen marksman, but also an abstemious man so far as alcoholic drinks are concerned.

There is always more or less of hill-climbing in the sport, which to the vigorous is but joyous exercise, but to others very laborious work; and the more zealously the sport is pursued, the greater are the courage and self-denial that are requisite in order to enable the sportsman to enjoy its pleasures and endure without inconvenience the fatigue which assuredly belongs to mountain climbing.

Then there is the bright and cheering prospect of sport in pure air, amidst varied, beautiful and extensive mountain scenery; air that is alike bracing to the nerves and exhilarating to the spirits, and so always encouraging to an ardent sportsman.

Grouse are by nature hardy birds, they hatch their young in April or early in May. If the spring is mild and sunny, it considerably favours the growth of young grouse; which then become strong and even powerful on the wing, by the commencement of the shooting season. But if the spring be

wet and cold, the young fledgelings, like young partridges, will have a perilous time of it; and the consequence will be that the broods will be small both in number and size.

In addition to the perils encountered by the young birds in a cold, wet spring, grouse are subject to the scourge of periodical visitations of epidemical disease; the mortality arising from which is sometimes so serious, as to very nearly put a stop to sport for a couple of seasons at the least, over vast tracts of moorland. The epidemic is fitful, sometimes passing on from moor to moor for many miles; at others only affecting here and there a broad tract of country.

Grouse disease, so called, is a subtle epidemic which has been attributed to various causes; but it may well be doubted if any one has yet been able to show satisfactorily from what source the germs of the disease originate.

Grouse, when very young, are called "cheepers." At the commencement of the season, whilst the birds are young, they are tame enough for most sportsmen; but as the season advances, and they become stronger on the wing, they are not to be shot by any but well practised marksmen.

Whilst the birds are young they do not fly far on being disturbed; but when older they are more canny, and fly to greater distances.

In sporting phraseology a "brood" of grouse

signifies what of partridges is termed a "covey;" a "pack" of grouse consists of several broods assembled together.

After having been dispersed, grouse do not habitually assemble again in the evening like partridges; but sometimes wait until chance throws them again in the way of their companions; which it generally does at their feeding grounds, or when they go to drink at mid-day.

It is the nature of grouse to "pack" in windy weather, and to disperse in fine weather.

In a flat country, grouse are far more unapproachable than on a moor studded with heathery hillocks. The advantages of the latter are two-fold: as it not only affords an excellent concealment to the sportsman and his dogs, but is also a favourite basking ground and cover for the birds.

The sportsman should contrive to come cautiously and suddenly upon hillocks and places likely to hold grouse; by which means he will often secure fair shots, though the birds be ever so wild: they are fond of sitting about hillocks, knolls, moss bogs, and such like.

Advance upon favourite and likely spots from below: never walk down a hill towards a place where grouse, partridges, or other game are lying.

Grouse prefer the cover of thick short heather to that which is long.

Dispersed grouse, like dispersed partridges, always

lie well ; but there is great difficulty in dispersing a pack of wild grouse.

Whenever you are so fortunate as to disperse a brood, mark them down ; and then stick to them so long as you know there is one left.

As the season advances, such is the best way of making up a bag.

Good markers are very essential for grouse-shooting ; and they must watch the birds narrowly. Often, before alighting, grouse take a turn to the right or left, as if for the very purpose of deceiving the markers. And though you may lose sight of them in the distance, follow their line of flight with your eye, and on their alighting, they may probably betray themselves by the flapping of their wings ; which, at the moment of pitching, is sometimes distinctly seen after the birds have been lost sight of in their flight over the heather. By watchfulness and experience considerable accuracy may be acquired by the markers.

On being disturbed in the morning, grouse almost invariably fly to lower ground ; therefore the sportsman should beat the surrounding hills first, and reserve the lowlands till the afternoon, which is often the best time of day for sport with grouse. They are then more easily found by the dogs, because they are moving about, feeding.

A good knowledge of the ground, and the favourite haunts of the birds, is a great advantage, as is also

a familiarity with their habits ; though both these vary more or less according to locality.

Grouse-shooting is sometimes uncertain as regards the locality frequented by the birds. A sportsman may beat a hill three or four days in succession without finding a bird ; but on the fourth or fifth day he may bag his ten or a dozen brace on the same ground.

The worst time of day for grouse-shooting is between twelve o'clock and two. The birds are then so uncertain, that it is difficult to know where to look for them : and the scent is often so feeble, that the dogs cannot help you much.

It is best not to disturb either grouse or partridges too early in the morning ; they lie better and are less wild if left till about nine o'clock ; between which time and four in the afternoon there is abundant time for a hard day's toil, if not a good day's sport.

In the middle of the day, or between twelve and one, grouse as well as partridges, lie quietly without running about ; consequently, if the weather be warm and the ground dry, there is no scent and they are difficult to find ; and if found, they spring very suddenly.

If the sportsman becomes much fatigued from over-exertion or otherwise, it will be useless to go on shooting, as he will probably miss nearly every time he shoots ; he should rest an hour, reclining

at full length, on his back : and he will find the time not mis-spent ; for if a good shot, he will probably shoot well during the remainder of the day.

When grouse are very wild, it sometimes occurs that they will lie well in the afternoon ; and then more shots may be had just before sunset than during the whole day.

During wet weather grouse are always wild ; the moor should never be disturbed whilst the heather is very wet.

In the early part of the season the old cock often tries the familiar dodge of enticing the sportsman away from the brood, by running off in a contrary direction ; sometimes showing his head above the heather ; and then running off again several yards before rising. And, occasionally, old partridges act the same cunning part, when their broods are young.

Do not talk to your dogs or companions when grouse-shooting—such a proceeding is fatal to sport ; the strictest silence should be observed, and the dogs hunted by dumb signals, after the manner suggested under the head “ Beating for Game ” (*supra*, page 152), and under the head “ Dog-breaking.”

When grouse soar up in the air on rising, the best time to shoot is, just at the instant the bird attains its full height, before darting off. At that moment it is nearly stationary, and the shot strikes with full force ; and, generally, the bird falls dead.

In windy weather grouse are puzzling birds for a young sportsman to kill : sometimes flying at such a rate as to tax the skill of the best shots.

An old cock-grouse is a very difficult bird to kill in a strong wind : the rapidity with which he rises and darts down again to the surface of the heather, and all the while going rapidly away, rendering him a puzzling object to cover with the gun under such circumstances.

The first hard frost always seems to tame grouse more or less. If the sportsman be watchful for it, and seizes the opportunity, he may generally meet with good success, though the birds were very wild and unapproachable a few days before.

After they become thoroughly wild, none but a quick and good shot stands any chance of killing them.

In cold windy weather, grouse resort to the valleys and sheltered localities on the lower slopes of the hills : and when severe frost sets in, and their feeding haunts are covered with snow, they seek their food in the cultivated valleys ; and finally at the ricks of the alpine farmers, where in deep snows, when hunger-pinched, they sometimes assemble in large numbers on the stone walls surrounding the homesteads. Then it is that poachers and others make terrible havoc in their ranks ; firing raking shots at them as they sit in long rows upon the walls. Black game in particular suffer severely from

such slaughter; and were it not for the prohibitory law which puts a stop to both grouse and black-game shooting so early as the 10th of December, the species would be exterminated from the land through such destructive shooting. The early close-time, and the aid of efficient keepers and watchers, are therefore the sportsman's main reliance: for grouse are then as tame as they were previously shy.

Grouse require harder hitting than partridges, consequently rather larger shot should be used, particularly after the end of August, when the birds are stronger, wilder, and more difficult of approach.

Long before November the keen edge of enjoyment wears off as the grouse become wilder and more wild: then it is that the majority of sportsmen return southwards, where birds of another feather invite their attention. The resident highlander has then a fairer chance, for the grouse being less persecuted are less suspicious. But the season for shooting them is then but short, closing as it does early in the month of December.

Young grouse, when shot, are readily distinguished from old ones, during the early part of the season by their smaller size, imperfect plumage, and the yellow at the root of the lower mandible of the beak: but later, the readiest test is that of suspending them between the thumb and forefinger, by the lower mandible, when, if young, the mandible

bends to the weight of the bird's own body; if old, the lower mandible is hard and unyielding.

The best sized shot for grouse-shooting during the early part of the season is No. 7: later in the season, and during the latter part of it, No. 6 and even No. 5 may be used.

GROUSE-DRIVING.

When grouse "pack," *i.e.* congregate in large numbers, they are so vigilant and wild as to be unapproachable to the sportsman in his ordinary mode of pursuit with dog and gun; in which case recourse must be had to the modern practice of "driving:" a pursuit much in vogue at the present day, on most of the moors in the highlands: but nevertheless attended with some difficulties, and requiring no little skill and dexterity in the use of the gun; some adroitness on the part of the drivers and markers, a familiar acquaintance with the moor, and knowledge of the haunts and usual line of flight of the pack.

A grouse-driving party usually consists of from six to ten or twelve sportsmen, who place themselves across the drive in positions concealed from view, in the anticipated line of flight of the pack, but wide apart from each other. The drivers and markers then approach the sportsmen from a long

distance behind, walking in line, each beater from fifty to eighty yards apart from the other; with the object of driving the pack before them, over the heads of the hidden sportsmen; who watch the approach of the birds (generally in very rapid flight) and make a quick and smart shot with each barrel, when they pass or come within range.

The arrangement of the drive must always depend on the nature and extent of the ground. Wherever there is a natural hollow, a ridge, a wall, fence, belt of cover, boulder, or other screen of any kind in the line of flight, it should be utilised as a standing-place for the sportsmen: bearing in mind however, that if a wall, or such like, screen a fence, bushes or tree-branches, through which the sportsman can watch the approaching pack unseen, should be laid on the top of it.

On many moors where grouse-driving is practised from year to year, batteries are put up at various distances apart, so as to cross the drives, or probable line of flight, of the packs. Some of these batteries are merely temporary erections, such as a pile of brushwood or turf; whilst others are intended to remain from year to year.

Excellent batteries may be formed of turf, or square sods, which can be very quickly run up. They are built in various forms so as to be available for the drive in different directions: when only available for one particular line of flight, they are

sometimes built in the form of a crescent. The battery is usually about five feet in height, and topped with a few bushes, or better still, thick sods of growing ling, through the stalks of which the sportsman is enabled to keep a sharp look-out, without being seen by the approaching pack.

The batteries, or positions, taken up by the sportsmen, should each be from about seventy to eighty yards apart: and must always be such as to admit of his standing upright without being seen. Crouching, stooping, or kneeling positions are to be avoided.

The beaters or drivers should walk in line, about the same distance apart, if the birds are very wild; but about fifty yards apart when not so.

Before commencing the drive, markers and flankers should be placed to right and left: the latter to keep the birds in line with the guns, and prevent their breaking off on either side.

The beaters as well as the flankers should each be provided with a staff about six or eight feet long, with a small flag at the top: the sudden raising and waving of which will usually turn the pack, or prevent the birds from breaking off to right or left.

In a well-arranged grouse drive, the ordinary beaters have red flags, and the one or two keepers white ones, or *vice versa*; the object of the different colours being to aid the keepers in signaling direc-

tions when necessary, along the whole line, without using the voice, which disturbs and unsettles the birds. Ten or a dozen beaters are capable of driving a wide stretch of moor.

On an extensive domain there are usually several drives in different parts of the moor; so that the sportsmen and beaters pass on from one drive to another. The usual length of a drive is from half a mile to three-quarters.

It is advisable not to place the batteries too far ahead, nor near places where the birds are likely to alight.

The habit grouse have, in some localities, of flying in the same direction, and making for the same points when flushed from a certain quarter, is very remarkable, and the knowledge of this habit, and observation of their usual line of flight are of great assistance to the sportsman in arranging the drive.

Every sportsman in a grouse drive should bear in mind that it is an indispensable precaution, that he keep his head, as well as his body, entirely out of sight. It is useless to stand peering over a wall or fence with the top of the head exposed, or bobbing up and down, as the pack is approaching: some of the birds are certain to detect him; and if so, the whole pack will branch off to right or left, despite all the efforts of the flankers.

As the pack approaches, the sportsman must be on the *qui vive*, and as soon as the birds come within

the range of thirty or thirty-five yards, if coming direct towards him, he should select his bird, and aim well in front of it; and on killing it, instantly select another and down with that also. The flight of driven grouse is so rapid, that if you allow them to pass over head before you fire, you must be double-quick in sending the charge after them, and aim three or four feet in advance of the bird you shoot at, or it will evade you. But when they approach a little to right or left, or obliquely, contain your charge until they are at right angles: in that case however, you must be very quick with the second barrel, or the birds will be out of range.

Shots at driven grouse must be taken in time, for delay and hesitation quickly convert an easy shot into a difficult one. Shoot, therefore, at approaching grouse, the moment they come within range. If they are passing over head, fire well in advance, (say from one to three feet, according to circumstances and the rate at which they may be flying).

With skill and dexterity combined, you may thus bring down a bird to each barrel; or rather, *endeavour* to do so, for it is a sport which taxes the best skill of the keenest and quickest shots in the land. Indeed, none but well-practised and skilful sportsmen can hit, with precision, wild, driven grouse: but he who can do so without fail, is justly entitled to the honourable distinction of "a dead shot."

The art further consists in shooting at the precise

moment ; so that the shot finds its way to the flesh under the feathers : and taking care to shoot sufficiently in advance of the bird, remembering the power and rapidity of its flight.

On some grouse drives in the highlands, you are seldom able to see the pack at all until it comes within range. Grouse-driving in the highlands is a very different thing to that of grouse-driving over a comparatively level or undulating moor. Therefore, as already observed, the arrangements of the drive must always be subservient to the nature of the hills and the surrounding country.

The aim of the sportsmen should be (if opportunity offers) to kill the leaders of the pack ; which are generally old cock birds.

If the pack can be scattered, and some of the birds marked down in good cover, they will usually lie very close, so that a sportsman, by observing the strictest silence, may with the aid of a good setter, make up a fair bag in a very short time. And even so late as the month of November, grouse may occasionally be found (in good cover) lying as close as in the early part of the season, particularly on a fine day after rain or mist.

Grouse-driving commences on some moors about the middle and latter part of September, or as soon as the birds " pack," and it continues to the close of the season.

If the moor be favourably situated for the purpose,

the sport may be, and frequently is, pursued with considerable success.

Young sportsmen usually find it very difficult to hit driven grouse : but in the course of time, with practice and dexterity in handling the gun, the difficulties will be overcome, and the knack of killing them acquired.

Grouse-driving is a sport to which belong the special features of safety and silence in this—that by reason of the sportsmen being usually placed wider apart than in battue, covert-shooting, and other modes of sport, there is less danger of accident from each other's guns, and less opportunity of disturbing the game by “ talking to your companion : ” unless it so happens that you choose to take a gillie to load for you or a servant with an extra gun. But as a rule, you will do better without an attendant of any kind. Dogs should not be permitted to accompany either the sportsmen or the beaters, unless they be retrievers. If the latter they should be leashed during the drive, and only let loose to find winged or lost birds.

THE FLIGHT OF GROUSE.

There is much variation in the flight of grouse ; sometimes, on being disturbed, they mount in the air like a pheasant, before flying off ; at others

they steal out of the heather as quietly as possible, and skim along within a few inches of the ground. When they soar they are good marks for the sportsman, but when they skim off slyly they require to be taken quickly, or they are soon out of range : their flight is very rapid and strong, and unless the sportsman be watchful he will find they have flown several yards before his eye catches them ; and it is those which get up at the longest distances that fly lowest ; those which mount, are generally sprung close to the sportsman or his dogs ; they then get up in greater terror, and so soar in the air several yards perpendicularly. Also, if you come suddenly upon them they mount in the same manner.

Grouse spring from the ground with great power on such occasions ; rising perpendicularly to the height of fifteen or twenty yards ; and then darting off with considerable swiftness, and so offering by no means an easy mark to the sportsman. The most favourable chance under such circumstances is just at the moment they attain their highest altitude before darting off on a long flight. With quickness and precision, a good shot may bring them down if the opportune moment be seized.

They take longer flights than partridges ; particularly after being often disturbed, and they generally fly down wind. The sportsman whose moor is but of limited extent, should therefore arrange his beat judiciously, and be cautious how

he drives his grouse, or he may spoil his own sport, by driving his grouse on to his neighbour's moor.

AS TO THE CHOICE OF A GROUSE-MOOR.

In choosing a moor for grouse shooting there are many things to consider. First a reference should be obtained and full inquiries made of the previous renter, or some other person well acquainted with the moor and neighbourhood. In the absence of any such reference, the sportsman should not be content with one mere visit of inspection, he should go over the moor two or three times, so that he may view and consider the situation and nature of the ground, whether it is much intersected by roads and foot-paths, which offer facilities for poaching; what extent of lowlands in proportion to hill and mountain, and whether any and what streams of water on the moor, and how situated: for grouse cannot do without water; the state and extent of heather, and other cover; the nature of near and adjoining lands; with various minor considerations. Generally speaking, the more remote the moor from any town, railway, or densely-populated neighbourhood the better: for where the facilities for the disposal of game are greatest, there poaching is most rife: consequently the cost of preserving is much enhanced, as extra

vigilant and trustworthy keepers and watchers must be employed.

A moor with a fair proportion of hill and lowland is to be preferred: for sometimes, and at some seasons, according to the state of the weather and other circumstances, grouse are to be found on the hills, whilst at others, particularly in the autumn, they seek, more frequently, the lowlands and other cultivated districts. But at the commencement of the shooting-season the heather-covered hills are the places for sport.

A moor with heather-clad hills, high and dry, and spangled on the sunny side with hillocks and clumps of heather, is always inviting to grouse, as a place for nesting and basking; and affording them shelter, cover, and concealment.

Another very important matter for consideration on hiring the shooting over a moor, is the heather-burning. It should be clearly understood what extent of heather is to be burned during the hiring; as any extensive burning particularly if on the best part of the moor, may alter, for several years, the whole character and value of the moor for shooting and preserving.

By statutory enactment heather-burning in Scotland is prohibited between the 11th of April and the 1st of November.

It is the old, or well grown, heather that shelters the grouse, and yet that is what is burnt to make

room for a new crop, which begins to grow in the spring of the next year, after the burning in autumn or winter; and although the young heather affords the best feeding for grouse, it supplies no shelter or cover for them, and consequently the birds become wild and unapproachable, and the shooting is thereby deteriorated.

Sheep folding and driving, which takes place in August, may also be carried on so extensively and injuriously as to disturb the grouse, and seriously injure the shooting.

Another objection, as to which inquiry should be made before hiring a moor, is a peat-bog, particularly if lying in the heart of the moor: as the excuse of going to work at the peat-mosses, or to fetch and carry the peat, afford rare opportunities, not only for taking game, but also for plundering the nests of eggs.

It should always be an important consideration to learn something of the adjoining and contiguous lands. If near a well-stocked and well-preserved moor, so much the better: but if common or open land, so much the worse. And water should be near the hills and accessible to the grouse at all times, without their having to seek it on another moor.

As a rule a flat-lying moor is not desirable: particularly if the whole extent be flat ground. The most suitable moor for grouse-shooting is that with

lowlands lying between hill and mountain, in fair proportion. And it is not always that the largest extent of ground is the most desirable : for a small moor, if favourably situated and well adapted for grouse, is sometimes to be preferred to one of double or even treble the extent of the other. There are grounds which are sometimes offered as moors for grouse-shooting, which, though of considerable extent, contain but the merest patch or two of heather ; and there are some indeed, where the heather is never known to bloom ; and yet they are offered to be let as extensive and valuable moors for grouse-shooting !

The shooting on all moors varies more or less during the latter part of the season according to the state of the weather : on some days it is found that the grouse are very numerous, whilst on others, though in the same week and on a good moor, scarcely a bird can be seen. Not so however at the commencement of the season ; for wherever the birds are hatched and reared, there they will resort during the early part of the season.

A *portion* of an estate or moor let for grouse-shooting is termed a “ hill.”

BLACK GAME SHOOTING.

The sport of black game shooting is similar, at the commencement of the season, to that of grouse-shooting; except that black game are generally found in moister places than grouse, such as swampy ground, among short thick rushes; on the brown-coloured seeds of which they feed, particularly when young.

The season for shooting them is very limited; commencing on the 20th of August, and ending on the 10th of December.

There is one remarkable peculiarity in the habits of black game, that in the first of the shooting season, when the broods are young, they lie so close as to suffer the sportsman to tread within a yard or two of their tails before they will take flight; but later in the season they become the wildest game on the moors, and are the most difficult of the species to approach.

The scent from black game is very strong to the nasal organs of the dog. They are easily found, and a wounded one may be readily tracked or "roaded" by a good dog. The young sportsman should use a steady old dog for the sport; walking up to the dog when it stands, with a slow and cautious step; and if a good shot, he may bag a whole brood in the space of a few minutes. The

birds lie very close on being first pointed, sometimes directly under the dog's nose, and the old grey hen is as reluctant to fly as her young; but, on being closely pressed, she suddenly rises with startling and tremendous flutter, frightening a young sportsman to such a degree that it puts his nervous system into a state of tremour; so that, although a splendid shot offers, and a large mark, he contrives to miss the old hen. If he can only command his nerves and take a steady deliberate shot, he may be almost sure to kill her. Having killed her, let her lie at present: don't speak a word or stir a step, but pop another cartridge into the barrel as quickly as possible, and another shot will almost immediately follow, as one or two of the brood rise. Down with them, and load again quickly as before: advance step by step slowly and cautiously, being ready for a shot right and left: and so, one by one, the whole brood will get up at intervals, probably all within range; but if not, carefully mark those which get away; they will fly only a short distance, and you will have them presently. In this manner every bird may be killed in the brood; and indeed such is very often the fate of many broods of black game in the early part of the season.

Old black cocks are considered a nuisance to the moor; they drive red grouse completely off the ground. Whenever a chance offers at a black-cock, the sportsman should take care to kill it: they are

nearly as tame as young ones at the commencement of the season, but towards autumn they are very shy and wild. At that time they may sometimes be shot by stalking, as they sit perched on a tree or a commanding knoll.

The average weight of a black-cock is not less than four pounds.

When beating coverts for black game the sportsman should keep a sharp look-out, for they are birds possessed of considerable cunning; often stealing away to some remote part of the wood, and then going off as slyly as an old fox. Sometimes they sit very close in the thickest part of the underwood; and when closely pressed, they rise with a great noise and flutter. But whenever they can, they steal away noiselessly; and perhaps you only get a glimpse of them when out of range. Black game require a hard hit to bring them down, more especially the old cocks.

The sportsman should avail himself, in covert, of every fair shot at the black-cock, and not wait in the hope of obtaining a clearer sight at him, or the chances are that the opportunity will be lost altogether. Besides, too, they are uncertain in their haunts: one small part of a covert may sometimes afford fine sport, whilst the whole of the other part may be closely beaten without flushing a bird.

On beating small coverts for black game, it is advisable to walk outside, a few yards in advance of

the beaters, keeping a sharp look-out ; black game being very uncertain in this respect—that sometimes they will rise from the wood with much flutter and noise, and at others they will glide out of the covert and be off out of gun-shot range before being seen. And from the natural formation of some coverts, it may be advisable to station one or two of the sportsmen at the far end outside, to await as quietly as possible the stealthy departure of some of the cock-birds, which have a habit sometimes of running along like pheasants to the extreme end before taking wing.

Noisy beaters are by no means desirable when looking for the black-cock in a wood. They may beat the covert as much as they like, but the less noise the beaters make with their tongues the better.

Coverts in which the birch and alder grow are the more favoured resorts of the black-cock.

In the heat of the day black game seek a shelter from the sun ; they are then frequently found in thick crops of bracken.

They are fond of visiting, in season, corn and stubble fields, where they feed on the ears and scattered grains of the corn ; but they have sentinels on these occasions, and are always vigilant and suspicious of their enemies.

Late in the season and in winter, black-game are in the habit of perching upon trees, sometimes in

considerable numbers, in the neighbourhood of cultivated fields : a good many then fall easy victims to the stalker.

THE FLIGHT OF BLACK GAME.

The flight of black game is peculiar : when seen on the wing at a distance, they very much resemble wild ducks, both in the form of their bodies and the motion of their wings. They fly with heads and necks stretched out like wild ducks, maintaining a steady, wheeling, or determined sort of flight. And they are much in the habit of following each other in the same track ; therefore if you chance to obtain a shot at black game as it is flying across country, by standing still and watching a few minutes from the same spot, you may probably obtain other shots.

Black game sometimes take long flights, particularly when they have been much disturbed by sportsmen. On those occasions they sometimes make a complete change in their quarters, flying many miles from one moor to another.

Young black-cocks may be known when in flight by the white feathers in their tails ; but in other respects, the plumage of the young cocks is very similar to that of the old females.

The old cock is readily distinguished by his large size, dark plumage, and gracefully curled or forked tail.

THE OFFICE AND DUTY OF MARKER.

The term "marker," in shooting phraseology, implies a person whose office it is when birds are on wing, to watch them in their flight, and mark the spot at which they alight; by which means the sportsman is enabled to follow them up with a greater certainty of sport.

Every marker should be provided with a flag and flag-staff.

A marker is generally stationed on a hill, in a tree, or some such commanding position; where he may sometimes be of great service in marking the place where the birds fly to when flushed by the sportsman in the valleys. It is also a good plan to place a marker on horseback; a not unusual course in undulating countries, whereby the marker is enabled to gallop from place to place during the flight of the birds, mark them down and return quickly to the sportsman.

Markers when stationed at a distance in a commanding position, should be able to direct the sportsman by signs, as by waving the flag to right or left or by lifting the cap.

It is indispensable that a marker should have good eyes, and the longer-sighted he is the better.

He should also be provided with a field glass,

particularly when the birds are in the habit of taking long flights.

Some men are much more useful and correct as markers than others, some being able to mark with splendid precision at half a mile or more distant; others are so careless and indifferent as to be of little or no use at all.

Markers should also, when necessary, be placed in such a position as to turn or deviate the flight of a covey which may be going in a contrary direction to that desired. They may sometimes do this by merely waving the flag or throwing the hat up in the air.

Markers must carry their attention well forward, especially on losing sight of the covey or pack in the distance: both grouse and partridges always turn up the whites of their wings and flap them just before alighting.

The sportsman should never allow two markers to be together; they are sure to talk, and so do more harm than good by disturbing any game that may be near; and if none should be near, their attention is, at least, taken off the duty imposed on them.

In a hilly country you must generally have markers.

Where game is abundant, markers are a nuisance.

WOUNDED GAME : HOW TO CAPTURE.

Whenever a young sportsman wings or wounds a bird, he should follow it up closely until it is bagged ; but many winged and wounded birds are lost by inexperienced sportsmen through too much haste, careless indifference, or an imperfect knowledge of the nature and habits of winged and wounded game.

All birds, when deprived of the power of flight, are more or less at the mercy of their pursuers ; and if not too severely wounded they make a bold struggle for life, using the utmost of their cunning to evade capture, whether pursued by man or dogs.

A winged partridge, on dropping into high-grown ground cover, as grass or turnips, cannot easily be recovered without the assistance of a dog that will trail it up entirely by the scent. For this purpose a retriever is of great service to the sportsman.

The habits of wounded birds are very deceptive ; inexperienced men would be surprised at the distance run in a few minutes by a winged bird, more especially a French partridge ; which, if only pinioned, will sometimes run across two or three large fields in an almost incredibly short space of time.

The sportsman, on killing a bird, should not move from his position until he has carefully

marked the precise spot at which it fell. Accurate marking in high grass, turnips, or other like cover is a useful qualification. A bird that falls dead to the sportsman's gun, sometimes requires more careful marking than one that is merely winged, because of there being no scent to assist the dogs in finding it, except just at the spot where it fell.

Retrievers, pointers, and setters, by training and practice, watch the sportsman's movements in the field, and the bird in its flight and fall. A clever dog so trained, after waiting quietly whilst its master re-charges the gun, will go straight to the spot where the bird fell, and secure it *instanter*. A dog, be it of what breed it may and whether pure or mongrel, if it be but clever at finding wounded game, is a useful and valuable animal to a sportsman.

If you lose a bird by reason of there being no scent, or your dog having taken the wrong scent, or otherwise, and feeling certain that the bird cannot rise again, you leave the spot for a time, and go there quietly in the course of an hour or more, the chances are ten to one but you will then find your bird.

Wounded game should always be followed up immediately, and energetically searched for until it is bagged.

When a bird is seen to twitch at the moment of being shot at, the sportsman may generally be

assured it is badly wounded, and he should mark it down and follow it up without delay.

If the legs of the bird shot at hang down immediately after the charge, it is a tolerably certain indication that the bird is mortally wounded, though probably hit in the legs or rump; it should be watched and marked down.

Any bird from which the feathers fly, or become disarranged on being shot at, is wounded, though not always mortally; such a bird, however, should be immediately followed up.

The primary rule that a struck bird should always be marked down and followed up before going in search of the covey, cannot be too firmly impressed upon the mind of a young sportsman.

More than half the number of birds which exhibit symptoms of being struck by the shot, fall dead within two or three hundred yards of the spot at which they received their wounds. But young sportsmen, in their eagerness to mark the covey, or those which fly away uninjured, sometimes lose sight of the wounded bird, which might probably be easily recovered, or at all events a second shot obtained at it if marked down. The chances are that a struck bird either falls dead within two or three fields, or it drops to the ground unable to fly or run; and, being unobserved, there in lingering agony it dies, or falls a prey to stoats, weasels, or other vermin. The dogs are unlikely to find it,

except by the merest chance, because it cannot move to disperse the scent ; and so, unless the dog happens to pass within a few inches of the spot, the bird is never recovered.

Winged birds, on the contrary, are marked down at the instant, because they fall at once on the wing being fractured, and the dog roads them immediately and follows up the scent. It is the bodily wounded birds that are more frequently lost.

WOODCOCK SHOOTING; AND THE HAUNTS AND
HABITS OF WOODCOCKS.

“Right up he darts amongst the mingling boughs ;
But, bare of leaves, they hide not from my view
His fated form ; and ere he can attain
Th’ attempted height, with rapid flight to cleave
The yielding air, arrested by the shot,
With shatter’d wing reversed and plumage fair,
Wide scatt’ring in the wind, headlong he falls.”

Poem on Woodcock Shooting.—ANON.

Most sportsmen take great delight in woodcock shooting : to some there is a charm in the sport which they find in no other. A successful day’s woodcock shooting is in the highest degree satisfactory to most men. The woodcock being a migratory bird and one of the choicest that is brought to table, is an object of keen pursuit by English sportsmen.

Woodcock shooting is, however, a sport requiring

a good deal of practice ; for although a woodcock may now and then be killed without difficulty, they are sometimes puzzling birds to hit, their flight being so uncertain and varied ; often dodging through glades, and among trees, as if purposely to confound the shooter. They are, too, so irregular in their flight, that on some days when flushed they fly slowly and lazily, and to a short distance only ; whilst on others they fly straight away at a rapid pace to a long distance, and quite out of marking range.

No one can become skilful in the sport without practice, and a fair knowledge of the flight and habits of the woodcock. On some occasions they may be found and killed as easily as young partridges : when perhaps the very next day they will be artful in their movements, difficult to find, and more difficult to mark.

Clumber spaniels are the kind of dogs best adapted to the pursuit ; they should be well trained, so as to be at all times under the perfect control of their masters and the beaters who accompany them. They should be active and persevering animals, and thoroughly up to the scent and haunts of woodcocks ; for they are birds which sometimes lie very close and are sluggish, and difficult to flush, though at others they are very easily put up.

Woodcocks usually arrive in this country by the first or second week in October, but in greater

numbers towards the latter part of that month. November is the prime month of the season for woodcock shooting.

They are to be found in the coverts near the sea in October. But if there happen to be no coverts near the spot at which they reach the shore, they keep to the open ground, glad to rest their weary limbs by taking refuge in brushwood, furze, hedges, rushes, heather, or whatever temporary cover may be nearest at hand.

“ When first he comes
From his long journey o'er th' unfriendly main,
With weary wing the woodcock throws him down,
Impatient for repose, on the bare cliffs ;
Thence, with short flight, the nearest cover seeks,
Low copse or straggling furze, till the deep woods
Inviting, urge him, there to make his fixed abode.”

On their first arrival they are sometimes in a very impoverished state, mere skeletons, and quite unfit for the table : but if the weather be mild and open, it is astonishing how quickly they gain flesh and strength. Being a voracious feeder, with great and easy powers of digestion, a few days will generally suffice to bring a starving woodcock into fair condition. Gifted by nature with every facility for seeking and finding its food—a large and beautiful eye, specially intended for giving the bird good sight at night, and a long sensitive bill for boring the soil ; it seeks its food in the choicest ground

of rich and moist loamy soils. The woodcock has no relish for wet and rank meadows, nor does it frequent gritty ground; such as clay, sandy, or gravelly soils.

Methodical in its flight, peculiar in its habits, the woodcock seldom or never flies abroad by daylight, unless flushed or disturbed. Its natural time of flight, and habits of feeding, are entirely nocturnal: returning to the woods and coverts to hide and shelter before daybreak, the woodcock is rarely a prey to the hawk.

The plumage of the woodcock bears so close a resemblance in colour to the brown fallen leaves with which the coverts are so thickly strewn in autumn, that when one considers that the habits of the bird are to hide and roost upon the ground of the coverts all day long, it would seem as if it sought by instinct the leafy-strewn woods, as the places of all others where it would be safest and most invisible to the eyes of its numerous enemies. But be that as it may, it is rarely that the human eye detects the bird upon the ground, nor until it takes wing.

A small double-gun with short barrels will be found the handiest weapon for woodcock shooting. Woodcocks when flushed, sometimes rise very suddenly; and among trees and brushwood, *one* chance only is usually all that offers. The sportsman should instantly take advantage of it, and fire

on the first opportunity ; it may be the only one he will have.

In well-grown woods and plantations, on flushing a cock, the sooner you can knock it down the better ; shoot, if possible, before the bird rises so high as the branches of the trees. When this cannot be done, endeavour to make a snap shot through the clearest opening that can be found, or through the twigs of the trees.

In coverts which are not of very long or lofty growth, time may generally be given for the bird to rise as high as the tops of the trees ; but, as a rule, a cock should never be allowed to go far before you shoot.

It is the nature of woodcocks, on being flushed in a wood, to make for the clearest opening, and then soar as high as the trees ; over the tops of which they skim off in a straight line, and generally pitch again in another part of the cover, or make a tortuous flight and drop in, or very near to, the same spot from which they were flushed.

A familiar acquaintance with the wood and surrounding locality will be found useful to the sportsman ; and the more frequently he beats the wood, and marks the line of flight taken by the woodcock, the better will be his chances of success : for there is usually so much sameness and regularity in the haunts and habits of woodcocks, and also in their course of exit from the wood, that they may

frequently be found in the very same spots from which they have been flushed before, and they leave the covert by the same route; therefore, after carefully observing the usual line of flight in any particular covert, the sportsman is in possession of very useful knowledge as to the best position to take when beating the same on another day; and such a man has considerable advantage over his fellow-sportsmen who are not so acquainted.

I have often heard it remarked, that no one ever saw a woodcock entangled in the boughs or bushes on rising; though flushed in the thickest part of the copse, and though the alarm be ever so sudden and great: the fact being that the woodcock always takes care to choose a place for its retreat, where there is a clear opening towards the sky, or a glade through which to pass and gain the open.

Woodcocks always prefer such covers as lie with a sloping surface, and aspect towards the morning and mid-day sun. In some places where this choice of retreat is at hand, they number more than two to one in the wood with the sunny aspect, to that with the northern or cold one.

Another of their favourite retreats is a sheltered valley in the midst of a wood, or such other places in the cover as are least affected by frost, and most exposed to the mid-day sun.

A wounded woodcock is easily recovered; it seldom runs from the spot where it falls.

When not wounded, woodcocks are in the habit of running many yards from the spot at which they are marked down : the running is performed on the instant of alighting.

On beating a cover for woodcocks, try the low growing holly bushes and evergreens ; the shelter of which is of all places the most likely to hold the object of your pursuit.

A woodcock is generally considered an easy shot to a sportsman ; but, notwithstanding, there is no bird which is more frequently missed, particularly when found unexpectedly.

It is true that the remotest chance is usually taken advantage of in woodcock shooting, and random and useless shots are often made ; being birds of passage, and much coveted too, sportsmen are generally eager to bag them.

Woodcocks frequently rise within ten or twelve yards of the sportsman, and often so clumsily as to offer the fairest of shots ; but they sometimes as suddenly dodge round a tree, or, by some other unexpected move, elude the skill of the best sportsmen.

They are often very indisposed to rise from their favourite haunts, and will sometimes fly round the wood as if in search of a secure retreat, and then cunningly haste back and pitch in, or close to, the very same spot from whence they were flushed. Manœuvres of this kind are inherent in the woodcock, and when viewed from a commanding position

are not only interesting to behold, but likewise very instructive to the sportsman, who, if he would condescend to become marker for his friends on one or two occasions, the knowledge he would acquire of the habits and flight of woodcocks by that means, would be of lasting service to him as a sportsman.

Markers are of essential service in woodcock shooting; they should be placed on the most commanding hill, or in a tree overlooking the top of the wood. A man so placed, if he keeps a good look-out, will be enabled to mark every cock that tops the trees: and they often pitch in such improbable places as few would think of beating.

It is also necessary in large coverts to be provided with beaters, but they should not be allowed to hurry the dogs: many a cock is left behind through the beaters being too hasty and eager; and on the other hand, many are left behind which might have been flushed had not the beaters been neglectful of their duty.

When the beaters are numerous and very noisy, woodcocks, on being flushed, are apt to alight on the outskirts of the covert; therefore, on beating back again in the same wood, the outside borders of the cover should be tried.

On flushing a cock the second time within an hour, the sportsman should be careful not to miss it; they are not so regular in their flight on being twice disturbed within a short time.

A woodcock is a much more cunning bird than many would suppose ; and after having been shot at and missed, seems to remember it, and endeavours to puzzle its pursuers as much as possible. After being flushed once, they lie very close on an attempt being made to disturb them a second time ; so that active beating is necessary in order to put them up.

The sportsman must watch the flight of a woodcock, and endeavour to follow it with his eye from the first moment of its being sprung ; he must look out in the openings, and snap a shot on the first opportunity, or the chance of another may be lost.

In long-continued and severe frosts, woodcocks desert their inland retreats, and go to woods and cliffs near the sea, generally preferring those on the south coast ; their reason for doing so is that, through the severity of the weather, they can obtain no food except on the oozes and marshes, which are not so severely affected by the frost, by reason of the influx and reflux of the salt water.

“ The woodcock then
Forsakes the barren woods, forsakes the meads,
And southward wings his way, by Nature taught
To seek once more the cliffs that overhang
The murmuring main.”

Woodcocks seek the sea-coast also in the month of March, and await in the neighbouring woods a favourable wind to assist them in their migration to

another climate. They are not so good eating in March, because of the near approach to the breeding season.

THE FLIGHT OF WOODCOCKS.

The sportsman who is familiar with the flight and habits of the woodcock, and with the rides, routes, glades, and openings of the coverts it frequents, is enabled to kill more than twice as many in the course of a season, as he who is not so informed.

The rate of speed at which the woodcock flies is deceptive; varying considerably according to the position from which it is flushed, the season of the year, time of day, strength of wind, &c. Thus it is sometimes slow and laboured; at others, twisting, darting, and dodging; and often rapid and direct as a hawk. Sometimes they begin with a heavy, lazy, flight, and then suddenly dart away with surprising swiftness.

They have a much greater power in their wings than many persons imagine; and when suddenly alarmed and much frightened, they are as difficult to shoot as snipes. Distance must be less regarded in woodcock shooting than in any other sport; because, by giving time in the hope of getting a better chance, you lose the only one which offers.

“Where woodcocks dodge, there distance knows no laws;
Necessity admits no room for pause.”

A woodcock on being flushed in covert makes directly for the glades, or for the clearest openings, when it soars as high as the trees, and flies in a straight line over the tops. To a sportsman who may happen to be beneath or within range, these are the fairest shots of all in woodcock shooting. There is so much steadiness in their flight, when once they have gained a clear space above the trees, that by firing more or less in advance of the bird, according to the pace or rapidity of its flight, you are almost sure to bring it down.

Woodcocks make a regular evening flight from the woods to the meadows, fens, and ditches; they go just at the beginning of twilight, and return to the woods early in the morning.

These morning and evening excursions to and from the wood are made with great regularity; if undisturbed, they fly day by day precisely the same route, and frequently to the same places, both in the wood and the feeding grounds elsewhere.

The regularity and sameness in the course of flight and habits of the woodcock are very remarkable. They appear as familiar with all direct openings and glades in the woods they frequent, as if they had used them for years. Day after day, and week after week, on being flushed, they fly off by the same route, through the same glades, and over the tops of the same trees. Even in the open, their line of flight does not vary twenty yards.

They appear to have certain retreats or haunts, and certain roads of flight leading to and from them.

It is therefore obvious that the sportsman who is familiar with these haunts and habits of usage, by practice, knows to a few yards the places at which to look out for a shot, on hearing the signal "Mark cock!" He therefore has considerable advantage over one who is not so informed.

It is very necessary in woodcock shooting to notice particularly the speed at which the bird is flying, and regulate your aim accordingly; no bird is more deceiving to the eye, because it frequently and suddenly changes the pace of its flight, from very slow to very fast; and whilst making its way out of the cover, sometimes dodges and twists its course in the most puzzling manner; but it no sooner tops the trees, or gains the open, than its flight is straight and swift.

Woodcocks do not generally fly far on being first flushed; but on being disturbed a second time within an hour or two, they suspect the enemy, and go off farther; on a third flush they go farther still, and so gradually become wilder. A good shot, however, will generally stop a woodcock at the first time of flushing, or, at all events, at the second.

PHEASANT SHOOTING.

The sport of pheasant shooting is considered by some persons as the most enjoyable recreation with dog and gun of any that can be found in this country: whilst others,—and among them some of the most experienced sportsmen and best shots in the land,—though they thoroughly appreciate a good day's pheasant shooting, consider it the least like real sport of any of their pursuits with dog and gun. There are, however, but few sportsmen who do not value a brace of pheasants when they shoot them. They are fine birds, very beautiful in their plumage; they are a handsome present to a friend or neighbour; an attractive dish on the table; and when nicely roasted and well served, are excellent fare, whether hot or cold.

But whatever may be the opinions as regards the sport itself, it is of all others, the most costly to keep up. It belongs as of right, and almost exclusively to the large landed proprietor; and is part of the birthright and inheritance of his heir.

The legitimate home of pheasants is the woods and coverts, where they roost upon the trees at night, and run about the coverts by day, and into adjoining fields, ditches, and hedgerows, in search of food and water.

When at roost on moonlight nights, they are

exposed to the depredations of the prowling night-poacher: and being birds that in the day-light spend the greater part of their time upon the ground, and being by nature semi-domesticated, are reluctant to fly from the gaze of a mere intruder, except in case of actual alarm and emergency, trusting rather to the fleetness of their legs; they are therefore easily captured in broad daylight, by the very simple devices of the stealthy poacher. It is obvious, therefore, that he who would keep up a good stock of pheasants in his coverts, must, so long as there are poachers in the neighbourhood, employ vigilant keepers, both by night and by day.

In the opinion of some sportsmen, the true enjoyment of pheasant shooting consists in going out with one or two friends only, where pheasants are neither very tame nor over abundant.

Pheasant shooting in closely preserved coverts, during the early part of the month of October, may be, in some respects, tame sport. But as the covert becomes more and more naked, and autumn advances, so pheasants become more and more wary; and then the sport becomes exciting, the birds much wilder, and they are not brought to bag so readily as in early season.

When the branches are all leafless, then the real enjoyment of pheasant shooting may be said to commence.

The young sportsman should bear in mind the

fact, that, although a pheasant makes a large show in flight, its tail, at which it is useless to shoot, presents the greater part of the show.

To kill a pheasant under ordinary circumstances when flying to right or left, the aim should be just in front of its head: if rising perpendicularly, just above its back: bearing in mind that it is of no use riddling its beautiful tail with your shot, however well directed your aim.

Early in the morning, pheasants may generally be found in hedges near the covert, particularly after a rainy night.

About four o'clock in the afternoon is a very likely hour at which to find pheasants in turnips, carrots, or mangold, near the coverts.

Sometimes (particularly after a long flight) they are difficult birds to put out of a hedge-row or thick cover. They lie so close that dogs may pass on both sides, and yet fail to spring them: and they often perch a few feet above the ground, so as to be out of the way of the dogs' noses.

In beating for pheasants in the thick-set hedges and coverts, always give your dogs the benefit of the wind, otherwise it will be difficult to find them, particularly cunning old birds.

If disturbed in windy weather, pheasants sometimes fly away down wind to very long distances: and unless marked down and driven back, the probability is that they may never return to their

native coverts. They hate windy weather, and seldom fly against strong gales.

There is no better time at which to find pheasants out of their coverts than during the first hour or two after sunrise ; at which time, being hungry, they go in search of food ; particularly to stubbles of wheat and barley which may be near adjacent.

A straggler or two may generally be found during the day, in the hedges enclosing the stubbles and other fields in which they find their food.

Pheasants venture farther from the wood in foggy weather : they are then soon bewildered, and know not which way to return. He who would keep his pheasants at home will not disturb them in foggy weather.

In pheasant shooting, the young sportsman must remember that it is necessary to shoot specially high when the bird is rising perpendicularly, and well forward when it is flying across : taking care not to be deceived as to the position of its body, for a cock pheasant has, as before observed, a long tail, which it spreads out broadly in flight.

The afternoon is the best time of day for pheasant shooting ; the cock birds, in particular, do not rise well till that time of day.

About two o'clock in the afternoon is the time pheasants roam about for drink ; they get into ditches and shady places in dry weather about that hour.

Pheasants are fond of resorting to ditches and marshy grounds where water is to be had; particularly when covered with well-grown brambles or other thicket, and it is no easy task to turn them out of such places unless provided with active little spaniels. In such cover pheasants will sometimes puzzle the dogs considerably, by doubling upon old tracks, and running backwards and forwards, and dodging the dogs in the most cunning manner. In fact a pheasant will seldom fly if he can escape by running.

Always beat the hedgerows and outlying spinnies when in search of pheasants outside large coverts.

Well-trained Clumber spaniels are the best kind of dogs for pheasant shooting, particularly in thick-set coverts.

When the woods are full of hares and rabbits, dogs are not much used in pheasant shooting, but beaters only: retrievers, if under perfect obedience, may sometimes be employed with advantage.

A pheasant is by no means a difficult shot; on the contrary, to a person accustomed to their mode of flight, they are easily brought down. It is the tremendous flutter and whirr they make on rising, which so discomposes the nerves of young sportsmen, as to cause them to miss their aim. The poet Watt gives a capital hint, when he says—

“Be but composed, and, I believe,
Your eye will ne'er your hand deceive.”

If ever so well fed, pheasants will stray a little. They leave the woods at dawn of day, and again in the evening just before sunset. Gamekeepers are (or should be) generally vigilant at those hours, and in the morning, a few hours after sunrise, they should beat the stragglers back into the woods.

A *nide* of pheasants signifies a brood or hatching, same as a *covey* of partridges: the term "covey," however, is never applied to pheasants.

Pheasant shooting in coverts is attended with considerable danger unless the sportsmen keep in line, as in a battue, and never shoot except far above the level of the human head.

In a bad season, and late in the season, game preservers generally desire their hen pheasants to be spared, and request their friends to shoot the cock-birds only: a request which necessitates a discrimination that is sometimes difficult to carry out; for it is not every sportsman who can distinguish cocks from hens, on a dull day, as they rise in the covert, unless very close and at short range.* It is nevertheless a mistake to kill down too many cocks, and so cause an inordinate propor-

* It was formerly a (so-called) custom upon some manors (and by some people the custom is still kept up) to impose fines upon the guests at a battue or shooting party, of so much per head for every hen-pheasant killed; the fines being carefully looked after by the recipients, the keepers, as one of their perquisites. The so-called custom being, however, open to so many and obvious objections, is rarely followed, except on small estates and rented shootings.

tion of hens, and consequently small nides and addled eggs.

Where wild pheasants are fed every day at certain seasons, it is advisable to feed them at a regular hour, and at a usual place in the covert; they then become so accustomed to it, that they will readily assemble to the call of the keeper, and so prevent other birds from picking up the food; and the keeper will be the better able to estimate the number or head of his stock.

Pheasant coverts require vigilant watching in suspicious neighbourhoods. A pheasant, whether dead or alive, is always a prize to a poacher; and no bird is more easily, quietly, or certainly taken, by means of nets, snares, and other notorious devices.

THE FLIGHT OF PHEASANTS.

A cock pheasant with its tail spread and wings expanded on a sunny day is a bird of grace and beauty: and is one of the most prettily plumaged of English birds.

On being suddenly disturbed, the pheasant rises perpendicularly from the ground with strong wing and loud whirring: and, having topped the trees, it glides off rapidly to the outskirts of the wood, if a small one; but early in season it is generally reluctant to leave the wood unless hard pressed.

A stray pheasant, on being suddenly driven up, mounts very high in the air, particularly if an old cock. Sometimes, however, a pheasant will leave the covert when hard pressed as quietly and stealthily as possible.

Some sportsmen reserve their fire until the bird has risen to its full height; and then shoot, at the moment of its darting off over the tops of the trees; but there are many occasions when this delay is unwise, and the shot must be made at the first clear sight.

The poet sportsman says:—

“Should pheasant rise, be most particular—
He rises nearly perpendicular;
Wait a few seconds till your sight
Perceives his horizontal flight.”

The startling whirr and flutter a pheasant sometimes makes on suddenly rising, when close at the sportsman's feet, more frequently than otherwise saves its life, by so thoroughly discomposing his nerves that he fires, and with certainty misses his aim.

He who would preserve pheasants and keep them to his coverts must not disturb them too frequently, or many of them will leave the wood never to return.

Pheasants fly farther on being much frightened and stay away from the coverts longer, than any other game.



IN THE COVER.

COVER SHOOTING,

Or, more properly, shooting in covert, copse, or spinny, is a varied sport; some men prefer it to any other. It is undoubtedly a sport that may be pursued with much enjoyment and success, whether by one person alone, or by two or more in company. When the party is numerous some of them are stationed outside the cover; where, oftentimes the better sport may be had; whilst others walk in line through the cover as in battue,* in company with keepers, and "beaters;" and so they push through the covers in line, the beaters beating the game out of the underwood and bushes, to the discordant tune of "Cock, cock, cock, cock! Hie! cock, cock, cock!" and so on, with variations, all through the wood. The words "Cock, cock, &c.," though applying to woodcocks, being used indiscriminately for any other game the cover may contain.

By far the most charming branch of the sport is woodcock shooting; but as this has been already treated of under a separate head, it will be unnecessary to discuss it here. Pheasant and rabbit shooting are also important branches of the sport of cover shooting.

Game of all kinds acquire, naturally, or by instinct, the habit of learning in what places they

* *Infra*, p. 246.

are most secure ; and though it is not every species of game that seeks the protection of woods and thickets, there are some species whose home and daily resort is the covert.

As the season advances and the leaves fall, game in the covers diminishes. The sportsman finds less and less every time he beats the woods. Hares do not like the falling of the leaf ; and so, many of them leave the wood and get into the open fields ; and pheasants shift their ground or move off on the first approach of noise or suspicion.

It is therefore necessary, when pheasants have become very wild through much persecution, to walk through the woods as noiselessly as possible.

When beating a copse, or wood, for woodcocks or any other game that may be found, it is generally desirable that the beaters should make as much noise as possible, whilst the sportsman should go on quietly just in advance. But those who have the good luck to take the outside of the cover cannot be too quiet.

The gun for cover shooting should be a short-barrelled breech-loader, about No. 12 gauge, the length of barrel not more than two feet four inches. A gun of this description may be handled and used freely among the undergrowth, whilst a longer one would often baulk the shooter, through catching against the branches.

In beating long narrow strips of copse, two sportsmen should walk one on each flank, outside the wood ; about thirty or forty yards in advance of the beaters, all of whom, with the dogs, should go inside.

Though a sportsman is said to "beat" a copse, or a field, by simply running his dog through, or over it in search of game, he himself is not a beater, in the term implied in sporting language.

A beater, strictly speaking, is one who is employed to accompany the sportsman, and with a staff to beat the bushes, fences, covers and thickets, or whatever else may harbour the game ; the object in beating being to turn the game out into the "open," so that the sportsman may shoot it as it flies or runs, as the case may be.

The duty required of beaters is therefore very simple, but differs according to the nature of the game, the country, the time of year, and other circumstances.

For instance, in a thick cover, when beating for pheasants, or woodcocks, the more noise that is made the better : whilst, on the contrary, when beating for grouse, partridges, snipes, and such birds as are not in the habit of frequenting woods and covers, but generally lie in low ground-cover, the beaters cannot be too silent : they should approach likely spots as noiselessly as possible, and then suddenly beat out the game.

The beater should never call out, on starting anything in front of him in open cover; because the sportsman, if attending to the sport in hand, is sure to see it.

Never employ a deaf man or boy as a beater.

A retriever is very useful in cover shooting, if used for retrieving only.

In large woods, when not shooting in battue, take every advantage of open places, and secure free scope for firing. Do not get under overhanging branches. The art of knowing where to place yourself for a favourable shot, is one of the secrets of success in cover shooting.

And do not refuse fair chances, under the hope or impression of meeting with better ones.

In covers, the paths or open passages are called "rides;" and lawns or openings in high-grown woods are termed "glades."

After beating a cover, the adjoining and surrounding hedges, clumps, and bushes should be beaten. An exciting finale to a day's sport may thus be obtained, particularly in pheasant shooting.

When cover shooting, employ plenty of dogs, for "many dogs find most game;" when rabbit shooting, seek out a clear space of ground of about ten yards square or more, and there stand as still as you can, and you will assuredly have a far better share of the sport than by roaming about with the dogs.

In no branch of the sport of shooting is there greater necessity for pointing out the perils attending it than in cover shooting.

It must be distinctly impressed on the minds of persons going out with others in a cover, to keep in line ; and never to shoot in any direction where you have the least suspicion another person may be. The danger is great even in covers where the ground is upon a level, but it is increased on an undulated or hilly surface.

As another warning to my young friends, I add Captain Lacy's sad tale of the death of a youth who was accidentally killed by his companions whilst shooting in a covert. The Captain says :—

“ To prove what even a single small corn-shot may do, we have an instance but too melancholy, where one of a party who had just been shooting in covert was missing, but was shortly afterwards found lying in a senseless state ; nor could this for some time be accounted for by his mournful companions, till at last some one discovered a very small speck of blood just above the eye-ball, where the pellet had entered and penetrated the brain. Slight as the injury externally appeared to be, it terminated fatally ; and thus was a fine youth, an only child, and the sole heir to immense wealth, prematurely cut off :—a case almost too afflicting to commemorate, further than as it may serve as a salutary warning to other shooters in covert, how guardedly

cautious at all times they ought to be in observing the proper time and direction in which they may venture to fire with perfect safety."*

THE BATTUE.

“Battue,” or bush-beating, (the word is derived from the French). In this country it signifies cover-beating for pheasants and other game by a party of sportsmen, who, under proper generalship, and accompanied by beaters, walk in line through the cover, or game preserve, at about equal distances apart: generally in the order of one or two beaters on each side of every sportsman: having regard to the extent of the cover, the density of its undergrowth, the number of sportsmen engaged in the battue, and other circumstances. In well-stocked game preserves many hundred brace of pheasants and hares are sometimes shot in the course of a day’s battue.

It is imperative that the whole party keep in line, in order to avoid accidents from each others’ guns, which would be almost inevitable if some were in advance of others, or if the party were indiscriminately scattered about the cover: and accordingly, whenever a shot is fired by either of the

* See “The Modern Shooter,” by Captain Lacy.

party in battue, all the sportsmen, as well as the beaters, halt in line abreast, whilst the discharged gun is reloaded: and on a signal given, all again advance: and so they go on all through the cover. The safety of every individual member of the battue depends very much on the discipline observed in keeping in line: and therefore, whilst neither of the party must be in advance of the others, so neither must lag behind.

Pheasants are sometimes troublesome birds to put up, unless closely pressed; they run either to the extreme end of the copse, or as far as they can to right or left, before taking flight: consequently the best sport generally comes at the farther end of the wood; termed the "hot corner" or "bouquet."

In some covers, in the absence of a close fence or paling, the keepers, a day or two before the battue, place nets or wire netting, about three or four feet high, in various parts of the cover; and around the farther end, sides, and boundaries; in order to compel the pheasants to take wing, and prevent their running out; which numbers of them would otherwise do. On reaching the net, after attempting to pass or get through it, they run back in the direction of the beaters, and are then compelled to fly. The best shooting therefore takes place at the extremity of the cover; where, being driven into close quarters, the birds are compelled to take wing

and run the gauntlet of a score or more of barrels. Without nets, or some such check for preventing the game running out of the cover, the sport would be poor in some preserves.

When approaching the far end of a copse or spinny that has been closely beaten, the sportsman on the outskirts or outside should go forward to a safe corner and there stand perfectly still, keeping a good look-out for "skulkers," which on those occasions sometimes squat in the last clump of bushes or brushwood, and they will not quit it until hard pressed.

After a battue, the boundary fences and adjacent hedge rows should be beaten for "stragglers," at which good clear shots may generally be obtained.

An experienced game preserver seldom allows more than one or two battues (or three at the most) in a season, in any one cover where he wishes to keep up his preserve. Pheasants would forsake the place if too often subject to the noise and terror of the battue.

A breech-loader is to be preferred as the most suitable gun for the battue; on account of the frequency of shots that offer, and the facility with which the gun may be reloaded; thereby avoiding the necessity of disarranging the line of advance; and reducing the time of stoppage for reloading to a mere momentary halt. And when nearing the boundaries of the cover, if the birds are numerous

and the nets have been judiciously fixed, a quick succession of shots will offer; and an active sportsman, using his breech-loader with skill and precision, may then do considerable execution.

Though some sportsmen may delight most in shooting where game is not very strictly preserved, whether in cover or in open country; and whether accompanied by a friend, brother sportsman, or keeper; and though some men may say that such is the true enjoyment of shooting; nevertheless most sportsmen appreciate a battue, and take great pleasure in being one of a party at those attractive and popular gatherings.

The rearing of large numbers of pheasants, the preservation of them, and the keeping large covers well stocked with game, is a difficult and costly amusement, which none but the wealthy can indulge in.

A battue is not only the most effectual means of killing down the pheasants in a well-stocked cover, but also the proprietor's best means of providing for the outdoor amusement of a large party of friends, at a certain season of the year. There is no branch of shooting at which better or more certain sport may be had than at the battue: involving as it does, plenty of practice in the use of the gun, in thickly grown copse and spinny, as well as in glade, ride, and open: but there is none in which it behoves a man to be more on his guard

in the careful handling and use of his gun. He must, notwithstanding, always be on the alert; quick and ready for a shot in "thick" and "open," overhead, and on the ground at hare or rabbit, and be careful not to appropriate the shots of his right or left companion, but to take those only that belong to him. He will have many a chance of "wiping the eye" of his "next friend," and should take care not to give the chance to such "next friend" of doing the same for him.

At the battue the sportsman may be sure of work for his gun to his heart's content: by no other means can so much pheasant shooting be had in so few hours. But it is a great mistake to suppose that because pheasants have been hatched under a barn-door fowl, brooded and reared for a time under a hen-coop, and afterwards fed almost daily by the keeper, that they are found in the autumn so tame in the covers that the shooting of them at the battue is mere idle sport. The noise of the first barrel that is fired, rings and echoes through the cover from end to end, and other shots following in quick succession, alarm and terror seize upon the affrighted creatures, causing them to shun the sportsmen with all the cunning and alacrity they possess, and all the swiftness their legs and wings can give them.

Skill and precision, with coolness and calculation, are as essential in the battue as in the more quiet

and retired branches of the sport. A pheasant is a large bird, but big as it is, it sometimes escapes, though a volley of barrels are fired at it.

Let those who have never shot in battue, and who think it easy and simple sport to shoot what they call "tame pheasants," just try their hands at it and see what sorry figures they will cut in the battue: particularly if placed in the outer ring, where they will occasionally meet with a "rocketeer," *i.e.*, a pheasant at full speed overhead, above the tops of the trees, which none but a first-rate shot can hit. And sometimes, in a bad season, it is the desire of the proprietor, to spare his hen pheasants: in which case few but the best and most skilful shots can be intrusted with the important and difficult duty of discrimination between cocks and hens when suddenly flushed in the cover. And the frequent warning of the keepers "Ware hen!" uttered in loud tone to right and left is, to say the least, disagreeable, if not discomposing to the nerves, of some sportsmen.

At most of the great battues, in whatever part of the United Kingdom they are held, are generally assembled some of the most distinguished sportsmen of the neighbourhood: and at some battues may be met the best shots and keenest sportsmen in the world; men who have pursued their sport with indefatigable energy in every quarter of the globe; who have faced difficulties and dangers,

endured fatigue, and sacrificed comforts and luxuries at home for the pleasure and excitement of sport with gun and rifle in foreign lands. But withal, such men thoroughly appreciate and enjoy the sport at those social gatherings.

The battue is, in fact, generally composed of a very select and exclusive company; for unless a man is well known, not only as a good shot, but also as a cautious and experienced sportsman, he stands no chance of being invited to take part in a battue on an estate of any note in the county; for the reasons, among others, that the sportsmen he would meet there would not risk their lives by shooting in the company of careless or inexperienced men. The proprietor of the covers neither wishes his guests to be shot and maimed, nor his pheasants mangled and wounded: but desires that whilst his pheasants shall be killed in a sportsmanlike manner, the lives and limbs of his guests shall not be put in jeopardy, nor their minds in anxiety, through having to shoot in company with any but careful and experienced sportsmen: and therefore it is (or should be) always the especial care of the proprietor to exclude from his battue all careless, incautious, and inexperienced sportsmen; and a good host does not act wisely in doing otherwise.

Objectionable battues are those where there is a snobbish rivalry to produce and publish records of

the largest numbers of heads of game killed : results only obtainable by highly artificial preservation entailing a very heavy expenditure. Guests who take part in such battues are usually expected to "tip" the head keeper so handsomely that, on offering him a sovereign as a very generous gratuity, they are informed, with an air of impertinent indifference, that he takes "only paper!"

English sportsmen should decline invitations to such battues. As a rule, however, gentlemen game-preservers of the present day object to the levy of such black-mail. We happen to know of more than one instance in which the invitations to the battue contained the very significant postscript, "Kindly bear in mind that my keepers are forbidden to receive gratuities."

SNIFE SHOOTING: AND THE HAUNTS AND HABITS OF SNIPES.

This sport may very justly be termed the zenith of the art of shooting birds on wing. It is one of the truest tests of good shooting; none but good shots are able to make up a bag by killing their fifteen or twenty couple of snipes in a day. Unskilful shots, and young sportsmen, fire away pounds of ammunition and hundreds of cartridges at snipes without touching a feather. With the *jack*

snipes they are sorely puzzled ; in the *common* or *whole snipe* they find their match.

The most skilful sportsmen often miss them ; though when well practised at snipes, more than at any other objects of the gun, a good shot kills almost every one he fires at.

It is a sport peculiar in itself, for it may be had in all quarters of the globe ; but it is one that requires considerable practice, with some knowledge of their habits, and also of the mode of searching for them. And to my mind they are well worth the trouble ; for a snipe, though but a small bird, is one of the choicest that is brought to the table.

Activity in the movements of the body, with steadiness in handling the gun, and a quick and accurate eye, are among the first essentials in the snipe shot.

Snipes arrive in the British Islands during the latter part of September, and in October ; but in much larger numbers in November and December.

The favourite haunts of snipes are sedgy and loamy bottoms, and black muddy places, by the water side, among the decayed roots of flag-weeds, rushes, sedges, and other river-side vegetation. Like the woodcock, the snipe has no relish for sandy or gritty ground.

Snipes have an insatiable appetite, and get very fat and fleshy in November and December if the

weather continues open, and free from severe frost. When they first arrive in this country they are usually thin and poor: being then wild and unsettled: but in good feeding grounds they soon become fat and heavy: when they generally lie well, and so afford the sportsman excellent shooting.

With a change of weather, snipes generally change their ground.

A snipe, when flushed, always rises against wind, and flies either up wind or across it: therefore if you be to windward you are certain to get a side shot, as the bird hangs, as it were, on the wind, before darting away at full speed.

A common error in snipe shooting, is that of firing too soon. Young sportsmen sometimes look upon snipes as birds of such very rapid flight, that they fancy there is no time to lose, and so fire too soon, and miss. Now, if they would only consider that the spread of the shot is all-important in the art of snipe shooting, and give themselves more time, with practice, they might be sure of almost every bird they shoot at.

Snipes generally lie better during windy weather than at any other time; and by reason of their flying against wind on being disturbed, they are a steadier and easier mark to the sportsman then, than on other occasions.

They are puzzling to the sportsman on bright cheerful days, and during white frosts, by reason

of the greater vigilance and activity which they display.

It is an error to suppose that the slightest touch of the shot will bring down a snipe. It depends entirely upon where the shot strikes, and the force with which it is driven.

Their bones are small and delicate, and their feathers very penetrable; therefore one pellet, if driven hard enough, will sometimes break a wing or strike a vital part; in either case the bird must fall. But a snipe will sometimes fly away with three or four shot in its body.

Another reason why young sportsmen miss snipes is, because they shoot neither forward enough nor high enough. They are such extremely active birds on wing, that a slow or hesitating sportsman stands but a poor chance of killing them.

When snipes are abundant, it is a common occurrence for one or more to get up within, or just out of range, a second or two after the sportsman has fired his gun.

He should therefore lose no time in popping in another cartridge. And, as snipe-walks are generally very wet, the annoyance of placing the butt-end of your gun on the ground to re-charge it is avoided with a breech-loader.

Shot of the sizes known as Nos. 9 and 10 are best for snipe-shooting, particularly with a 20-bore gun, which is the proper size for this sport. Such a gun

weighs only $5\frac{1}{2}$ lbs., and may be charged with 2 drs. of powder and $\frac{3}{4}$ oz. of shot.

When a snipe crosses either to right or left, be sure to shoot well in advance; and, if a long shot, a foot or more is not an inch too much.

If the bird rises at thirty yards' distance, knock it down as soon as possible, and before it commences those graceful evolutions with which every snipe-shooter is familiar.

But when snipes rise at your feet, or within twenty yards, give them more time; and the unsteady flight with which they start off will have settled into a quieter motion of the wings; and the sportsman will thereby make a surer mark, and be more likely to bring his bird to bag.

But it is only when they lie well, and rise within a short distance, that the sportsman should allow them to complete their zig-zags; the greater number of shots, it will be found, must be made in double-quick time.

When looking for snipes, walk steadily and silently, with the eye ranging well in advance.

Always work *down wind* when in search of snipes; because, on being disturbed, they fly up wind; and so pass to the right or left of you, within fair range. If the sportsman proceeds in a contrary direction, so rapidly does the snipe fly from him that it is out of range before he can accurately level his gun.

A pointer or setter may be easily trained to stand at snipes, and an active dog so trained is sometimes of service in snipe shooting; but by reason of the necessity of going down wind whenever you can, unless the dog has been taught to hunt at right angles to the wind, you are best without him. On good snipe-walks there is no need of either pointer or setter. A retriever, well trained to keep to heel, is all that is required.

Snipes do not lie about frozen places; they may be found during frosty weather, in small rivulets and unfrozen waters, in dykes, bogs, and marshes. The most unlikely time to find snipes in their usual haunts is during a white frost; on occasions of the kind they assemble in "wisps," and take to the uplands, and on being disturbed, spring all together.

In cloudy threatening weather, and sometimes on warm days, snipes lie close; and on being disturbed, fly with less activity, and altogether in a steadier and lazier manner; on such occasions they are easier to shoot.

Jack snipes always lie close, especially in long grass, from which they will not rise without very close beating; and then they are so foolish as to pitch again and again within one hundred yards of the same spot; and sometimes giving young and unskilful sportsmen six or seven chances ere they can be frightened from their haunts.

Day after day the same jack snipes may be found

in the same walks and the same spots ; and day by day the novice may fire away at them to no purpose ; for though they rise at his feet he constantly misses them ; and so, a couple of jack snipes may afford him a week's sport ere he brings them to the bag ; indeed, such is no uncommon occurrence.

Young sportsmen frequently fancy, from the habit these birds have of pitching again so soon, that they are wounded ; and rush forward under an impression that the bird will "never rise again." Their delusion, however, soon subsides, as the tortuous little creatures dart off again another hundred yards, and so on, working their young persecutors into a state of great excitement.

" So swift a bird is apt to make
Young shots with indecision shake ;
Such are indebted, when they kill,
Much more to fortune than to skill."

The common snipe is a very watchful bird ; and a sportsman must tread the marsh lightly as a fairy, if he hopes to get within short range of it.

On heaths and rush-clad hills, and in turnip fields, they are less exposed and less difficult of approach.

The chances are twenty to one against a novice killing a common snipe.

The great snipe is by no means a difficult bird to kill : not only on account of its larger size, but because of its steadier flight and more sluggish

habits. It generally lies well, and offers a fair chance to the sportsman. It is, however, a scarce bird, but a very choice one for the table.

A keen-eyed sportsman distinguishes its species the moment it rises from the ground, by its red tail and heavy body, with white in the under part. When disturbed, the great snipe generally pitches again within a very short distance.

Snipes are somewhat erratic in their movements. Sometimes good sport is to be had quite unexpectedly; whilst at others when the weather appears to be exactly suited for finding them in certain haunts, the sportsman is disappointed. Therefore, when plenty of snipes are found, make the most of your sport. One frosty night will drive them from their haunts. In boisterous weather, snipes are more scattered about the walks. It is in frosty weather, and on bright sunny days, that they are more frequently seen in wisps.

On shooting a snipe, keep your eye on the spot where it falls, or carefully mark it by some conspicuous object, whilst reloading: a dead or wounded snipe is sometimes difficult to find. If it falls into the water, wipe the feathers dry before putting it in your pocket.

If you are a very quick shot, and can handle your gun dexterously, you will never do wrong by shooting at a snipe the moment it rises to the level of your shoulder: that is to say, whenever

it gets up at thirty yards' distance and upwards. The snipe has neither way nor speed upon it at first, and is as steady a mark as can be desired, at the moment alluded to; but after flying about twenty paces it is at the top of its speed. Therefore, when snipes are wild, knock them down whilst they cry "Scaipe!" or rather "Schayich!" which they generally do as they spring from the bog.

December is always the best month for snipe shooting, particularly if no severe frosts prevail.

A few years ago, whilst staying with a friend who has one of the best snipe-walks, and some of the best snipe-grounds I know of in this country; after a very successful day's shooting among a party of sportsmen, a discussion took place after dinner in the evening, on the sport which had afforded us so much pleasure. Some affirming that snipes were easy shots, others that none were more difficult. The result being that a bet was made with one of the party, who had the reputation of being a "dead shot," that he could not kill 25 snipes in succession without a miss. The bet was instantly accepted. And upon its being understood that there was to be no restriction as to the size of the gun, nor as to the quantum of the charge, the accepter offered, if the challenger was so disposed, to double the bet, and to kill 50 in succession without missing. The challenger accepted the offer.

The shooting came off on two successive days.

The accepter used a 10 bore gun, which he charged with 4 drachms of powder and $1\frac{1}{4}$ oz. of No. 12 shot; and killed his 50 snipe in succession without a single failure: walking them up down wind; and rarely refusing a shot, notwithstanding that some of them flew rather awkwardly.

But it was no great feat after all for a skilled sportsman. The spread of small shot from a 10 bore gun is very wide; and as each charge was driven by 4 drs. of powder, the birds had an almost hopeless chance of escape at the hands of such a shot.

The winner readily admitted that had he been restricted to a gun of small calibre, as a 20 or even a 16 bore, he probably could not have done it.

THE FLIGHT OF SNIPES.

The flight of these birds is swift, graceful, and beautiful in the extreme. There is no bird whose flight is more to be admired. Sportsmen gaze at them with pleasure; whilst the naturalist beholds them with curious admiration, as they gracefully whirl through the air in semicircular ascent; after performing the prettiest and most perfect zigzag flittings; alternately to right and left, as if to gather speed, as a skater, wherewith to assist in more elegant evolutions. The snipe then glances off and soars in the air, when, after five or

ten minutes' flight in gyratory form, it suddenly wheels round again and drops within a few yards of the spot from whence it sprang; but sometimes running a few yards after alighting.

There is no bird of its size that has larger wings. It therefore flies with great power.

On rising from the ground, a snipe starts with a rapid zigzag motion; darting off and cleaving the air with powerful strokes of its wings a few yards, and then, raising its head as if to look around, steadily soars, and commences its tortuous line of flight. It is just at the finish of its twistings, and at the commencement of its curvilinear course, that it offers the best mark to the sportsman; but, as it is very often out of range before the zigzag performances are concluded, it will not always be prudent to wait for the better chance, but rather try your skill at the bird in its most puzzling form of flight.

On warm, windy, and cloudy days, snipes fly with lazier and more careless effort, than on bright or frosty days.

It is the common snipe which is the most active and vigilant in all its motions, and consequently the most difficult to kill. The large snipe is not so wild; though in the motion of its wings, the form and line of its flight it resembles the other: still it is less rapid and tortuous. On rising from the mire, the large snipe often soars up perpendicu-

larly in the air several yards; so that, when flushed at the feet of the sportsman, the bird seems to soar directly over his head.

The flight of the jack snipe is similar to the large snipe, with the exception that it never soars high in the air on first springing from the ground: and very seldom performs any of those elliptical evolutions so much admired in the common snipe.

Some sportsmen, good shots in other respects, do not shoot at snipes, because of the difficulty they experience in hitting them. But probably they have never carefully watched and considered the flight of the snipe, in its varied and beautiful gyrations, or they might kill them as certainly as they do any other birds.

HARES.

I am one of those who consider hares ought never to be shot; they cannot fairly be looked upon as legitimate objects of the sportsman's gun: but as animals of the courser's and the hunter's chase, they are their inalienable right.

“ And let the courser and the hunter share
Their just and proper title to the hare.

* * * * *

The tracing hound by nature was designed
Both for the use and pleasure of mankind;
Form'd for the hare, the hare too for the hound,
In enmity each to each other bound.”

Foxes have a passport which holds them free from harm, though they run the gauntlet of a thousand guns; and why should not the same privilege be granted to the hare?

When a hare jumps off its form, within range of the gun, it is so fair and large a mark, that one would suppose it can seldom be missed by the most juvenile of sportsmen; and if not killed, is almost certain to be wounded.

In order to kill a hare on the spot at a reasonable distance, running straight away, the gun should be levelled at the tips of the ears, if they are standing; but if the ears are thrown back on the shoulders, the aim should be just over the forehead, and slightly in advance of the nose. If young sportsmen would only remember this when wishing to shoot a hare running from them, they would never fail to kill on the spot, at any distance between twenty-five and forty yards; observing, that the greater the distance, the higher and more advanced must be the aim.

In shooting at a hare running across to right or left, aim well in advance; and if far off, as high as the tips of the ears would be if erect.

When the hare is running across ploughed or ridged land, be careful to fire as it rises to the crown of the ridge, not whilst dipping its head in the furrow. Unless this is attended to, the chances of killing are very remote. In shooting at a hare

in turnips or mangold, fire well in advance, or you will not kill her.

The remark made elsewhere in these pages, that a bird may be killed at a greater distance when crossing, than when running from or approaching the sportsman, applies with equal force to hares and rabbits; which may sometimes be killed ten or twenty yards further in cross than in straight-away shots.

When the sportsman sees a hare approaching him, he should stand as motionless as possible until it is a broadside, and then fire as soon as practicable, and according to the rules before laid down: bearing in mind the necessity of regulating his aim according to distance.

Use No. 4 or 5 shot for a hare; and do not fire at too great or doubtful distances.

In a neighbourhood where hares are not much hunted, they lie very close on open fields, and often get up at the feet of the sportsman; on such occasions they jump off their form, and then run at a tremendous pace; but when much hunted they become less trustful, and steal off slyly on suspicion of danger, running away immediately at the top of their speed.

In stubble and fallow fields, hares generally lie within a range of thirty or forty yards from the hedge. Those are the favourite and most likely distances at which to find a hare, be the size of the field what it may.

In wet weather hares prefer high ground. In dry weather valleys and lowlands. But they are sometimes very uncertain; and where you feel almost sure of finding a hare, you find, instead, an empty form.

Before seating itself, and particularly after having been chased by dogs, a hare will sometimes take a long leap into its form, so as to endeavour to cut off the scent.

As a general rule, the further a hare is found from any covert, the better it will run; it shows the greater confidence in its speed.

The favourite outlying places of a hare are wheat stubbles, fallows, clover, and grass lands.

When a hare is chased by a dog across a fallow, it will assuredly turn into a furrow ere it proceeds far across the ridges.

RABBIT SHOOTING.

If not good sport, this is unquestionably capital fun. Young sportsmen are particularly fond of it; and it is very good practice; teaching them to "look sharp," and be dextrous in handling the gun.

As this sport is pursued with much greater zeal by young sportsmen than by old ones, it is necessary to warn the inexperienced of the dangers attending it, and to remind them that many deplorable

accidents have arisen through the indiscretion and over-eagerness of young rabbit shooters.

There is one universal rule in this sport, which should be strictly observed, from one end of the land to the other, which is this:—"Beware of shooting at a rabbit in the hedge." It is so grossly unsportsmanlike as to be wholly inexcusable.

Though ever so fair a chance offers, and though you may feel certain there is no one on the other side of the fence, make it a rule, through life, never, *under any circumstances*, to fire at anything, whether rabbit, bird, or otherwise, in the hedge. Though the chances be ever so inviting, and your confidence ever so great, do not, for the sake of killing a paltry little creature, incur the risk of killing, maiming, or blinding for life, a human being, a horse, a cow, a dog, or some other valuable animal which may be on the other side of the bushes or in the ditch.

All experienced sportsmen are so extremely tenacious on this point, that if they saw a fellow-sportsman infringe it, they would never again go out with him so long as he carried a gun. And I have seen an old sportsman take a gun from a youth who shot a rabbit whilst it was running along the hedge, box his ears, and send him off home, with a prohibition that he should never again bring a gun upon his land.

Those only who have seen narrow escapes (as I have) can truly estimate the importance of a firm

adherence, through life, to this simple rule,—“ Never shoot at anything in a hedge.” A disregard of it has embittered with sorrow the cup of life of many a father, brother, friend, and near and dear relative.

“ Ye parents, let your sons these stories know,
And thus you may prevent the distant woe.”

“ Such sad events in every place have been,
Such fatal ends have darken'd every scene.”

Rabbits are among the most prolific animals in the world. Daniel, in his “Rural Sports,” says, “ They breed at six months old, bear seven times annually, and bring five young ones each time.”

It is, therefore, very easy to get up a rabbit warren anywhere, and in a very short time.

Rabbit shooting in a covert, where here and there a clear plot of ground can be found, is lively sport ; and it is the same in parks, and on heath-land, where there are extensive beds of fern and furze. Rides should be cut and cleared through them, and then excellent snap-shooting may be had.

For rabbit-shooting, plenty of small dogs are required, to scuttle about the fern and thickets, to turn the rabbits out ; for they sometimes require a great deal of pressing before they will quit their hiding-places.

The sportsman should stand perfectly still and silent whilst his dogs are hunting, keep a vigilant look-out on the clear space of ground in front of

him ; and, on the rabbits crossing it, which they are sure to do when hard pressed, he will find it capital fun to knock them over. Shoot well in advance, aiming just in front of bunny's nose, and you may be sure of killing. Fix your eye on the head of the rabbit, as if that were the only vulnerable part.

The thick fur coat of a rabbit is a powerful resister of shot ; and unless the shot strikes a vital part, there is no certainty of killing beyond thirty-five yards' distance. A small light gun will do for rabbit-shooting ; and the best sized shot is No. 5.

Rabbits are very active and tenacious of life. Unless hit severely they will get away, crawl into a burrow, and die.

Calm fine weather is best for the sport. Cold north winds are always unfavourable.

As soon as ever the rabbit is clear of the fence or thicket (if at a reasonable distance), the sportsman should shoot. Take the first chance, for it is seldom a second offers.

On warm sunny days, when rabbits lie out, they are more fond of lying in tufts of grass than in anything else. They are generally pretty close to the hedge, and will assuredly make for it on being started.

Be careful not to shoot the dog instead of the rabbit. All dogs have a strong propensity for

chasing rabbits, and run after them with their noses close to the scut. Whenever a dog is very close upon the rabbit, the sportsman should never shoot; unless, in his cruelty, he would rather kill or blind the dog, than shoot the rabbit.

Snap-shooting to perfection may be had with rabbits in a low cover, up which a ride is cut and cleared. One side of it should be hunted at a time; and so, after all the rabbits are driven across the ride from one cover, they can be beaten back again, and so made to run the gauntlet a second time. In order to become a good snap-shot a man must have a very quick, ready hand, and a watchful eye.

Ferretting rabbits is slow sport compared with the other; though sometimes, when they "bolt" well, it is very good fun. Choose a calm sunny day for ferretting: they will seldom "bolt" in cold, dull, or windy weather. Keep your tongue quiet and stand still, but never in front of a hole. If a rabbit comes to the mouth of the burrow, and sees a dog or a man in front, it is ten to one but it will retreat. But where strict silence is observed, and everyone keeps in his place, the rabbit will steal out, pause, look around, and then bolt off at the top of its speed.

When a ferret lays up, the best mode of drawing it, is to rip open the belly of a newly-killed rabbit and thrust it into the hole on the windward side of

the burrow; the fumes of the warm entrails are generally irresistible to the ferret, and draw it, as by instinct, to the scent.

Excellent practice with the pea-rifle (called "Rook and Rabbit Rifle") may be had, on summer evenings, by hiding within range of a spot where rabbits creep out to feed. A meadow, or park, skirting a wood, is exceedingly favourable for this sport.

The months of December and January afford the favourite time and season for rabbit-shooting and ferreting.

A FEW STRAY HINTS.

Do not toil too hard at your sport, particularly if you are not very strong. Over-exertion weakens the nerves and injures the constitution.

If your shooting-ground lies at a distance from home, always ride there, and let your dogs ride too ; and the same on returning.

The sportsman, during the month of September, should never take the field without a knife, a drinking horn, and a shilling for largesse.

The sportsman who is most silent of tongue and tread, gets nearest to his game.

The human voice alarms and frightens game ; and, therefore, a garrulous or blustering sportsman usually finds, that “ the birds are wild.”

Do not fire too soon at a bird which rises within a few yards of your feet.

When a bird rises at fair range, down with it as soon as possible : for delay converts an easy shot into a difficult one.

By keeping a few of the most central fields on your manor quiet, and seldom or never shooting in

them, you have always a nursery to which your frightened birds will resort, and your stock of game will be maintained.

Always allow game to cool thoroughly before packing it, or you may have the mortification of receiving an acknowledgment from your friends at a distance, of a hamper of game which arrived "*en peu trop haut.*"

Always hang up your birds in the larder by the legs, with their heads downwards, if you wish to preserve them; they will keep longer in that position than if hung with their heads upwards.

Game will not keep if carried long in the pocket; make your gillie carry them on a shoulder-pole, or in a game bag of net-work.

A hare will keep longer, and be of much nicer flavour, if paunched on the day it is killed, and before being hung up in the larder.

If game-birds remain a few hours packed in a hamper along with an unpaunched hare, they soon become tainted.

Never vary your eye from the bird which you first fix upon as the object of your aim; and never pull trigger unless your aim be true.

When a sportsman misses several shots in succession with one barrel, without being able to assign any reason for so doing, he should use the other exclusively for some time.

When a sportsman is fatigued or flurried, the

arm and hand, and consequently the nerves, are never steady.

The young sportsman must always shun spirits; the old one sometimes requires a stimulus of the kind to help him over the hedges, and to lift his legs out of the heavy soil fallows.

Never allow yourself to be too eager in your sport, nor vexed, nor disappointed at your poor success.

Never beat a field of standing corn; nor turn your dog into it; nor into standing clover seed, nor standing seeds of any kind: it is not only un-sportsmanlike to do so, but injurious and annoying to the farmer; sometimes causing much ill-will: and if the farmer be spitefully inclined, he may retaliate by damaging the shooting, and that too in more ways than one.

Never beat a field in which sheep or cattle are grazing: the presence of the dogs excites the cattle; sometimes causing them to chase the dogs; and the sheep run away in fear; and the report of your gun would make matters worse. Farmers and graziers are never pleased to see sportsmen among their flocks and herds.

It will be found to be good policy on the part of sportsmen to act at all times with generous consideration towards the tenant-farmer, and with due and proper regard to his interests, being cautious of doing anything which might give him annoyance or cause him any damage, however trivial; and

never neglect to shut and fasten gates after you. If he finds you protect his property and interests, he will not be unmindful of your's.

In shooting with a young sportsman, or a stranger, always allow him to precede you in getting over the fences : it may be that you save your life, or a limb, by the precaution.

Always correct and point out errors which you observe in young sportsmen ; and rebuke any one, whether old or young, in whom you detect carelessness in handling the gun.

When shooting in covert, or in any other than open ground, always take care to know where your friend is, and to let your friend know where you are, that you may not have his blood on your head, nor your blood on his.

If you are a game-preserved and purpose giving a battue, do not invite either careless, excitable, or inexperienced sportsmen ; but those only who shoot well, and are cautious and experienced in the manipulation and use of their guns.

However generously disposed you may be towards your friends and neighbours, if you have a valuable dog never lend it : and the same may be said of a favourite gun. If your friend or neighbour thinks you unkind in refusing to lend them, show him this hint in the book of "The Dead Shot."

WILD-FOWL SHOOTING.

THERE is no branch of the art of shooting that requires more skill, practice, and knowledge of the habits of birds than that of wild-fowl shooting; not so much on account of any special art in shooting them when fairly within range, if provided with a suitable gun; but because of the natural and habitual cunning and wariness of the birds, and the difficulty of getting at them, though in sight, on the wide open expanse of water, or savanna, their chief resorts.

Favourable and advantageous places for pursuing the sport of wild-fowl shooting are tidal rivers flowing into the sea, but running many miles inland, and abounding on each side with broad oozes and savannas, intersected by numerous creeks, rills, fleets, and pools; and surrounded by marshes, fens, and low-lying lands, with sedge, rush, and reed beds. In localities such as these wild-fowl shooting, in almost all its branches, may be enjoyed to the heart's content of every true sportsman: provided they be not too much infested with rabble-gunners, and indiscriminate sportsmen.

The experiences of the recent severe winter of 1880—1881, show that as many wild fowl visit our shores now as ever: but the very large flights do not stay with us as they used to do; and they are sometimes (not always) more *wary* than in years gone by. The reason for this is, the greater persecution and disturbance to which they are subjected: the greater number of amateur gunners and shooters, both on land and water; the latter in boats of every shape and form, firing indiscriminately at everything with wings, regardless of its uselessness; and whether sea-gull, kittiwake, puffin, cormorant, sprat-loon, or other uneatable and useless bird; but upon which neither sportsman nor professional punter would ever think of wasting powder and shot. Every shot so fired tends to alarm and put on the *qui vive* all wild fowl within hearing of the report. No wonder, then, at the increased difficulties experienced by sportsmen and professionals in approaching wild fowl on open waters. Their best skill is taxed to the utmost: as frequently when on the verge of success, bang! bang! bang! go the guns of an amateur boating party at a hovering sea-gull. When the consequence probably is, that a large paddling of wild ducks or a company of widgeon, which the moment before the punter had nearly approached, in a remote part of the bay, are seized with alarm, take wing, and soar in the air to look out for the whereabouts of the threatening artillery.

And, but for the alarm, some fifty or one hundred of which would probably in a few seconds more have fallen to the lot of the punter.

So, too, many a random shot at an ox-bird, or a sand-piper, on the shore, has lost a punter, though a mile away on the other side of the bay, many a dozen pairs of wild ducks. I have myself experienced several such instances.

Happily, however, there are yet many estates on which are extensive broads and lakes; and where creeks and rivulets run many miles inland through private property, where no trespasser may venture; and where the wild fowl are as free from such disturbances and as strictly preserved as the game. So long as such nurseries remain intact, and the good old decoys are kept up, there will be no lack of wild fowl in season. But wherever the general public have access, in the present age of fire-arms, the success attending the sport of wild-fowl shooting with punt and gun must, of necessity, be very precarious.

A wild-fowl shooter should not be discouraged at blank days: for wild fowl are roving birds: they are "here to-day and gone to-morrow." Their movements are, however, much regulated by the wind and weather. Their favourite haunts may sometimes be found deserted; though only for a time; and on their return, the probabilities are much in favour of their bringing several followers with

them : so that, on the next day, the sportsman on going over the same beat, at early morning, may be rewarded with abundant sport, and the disappointments of the previous day obliterated by the success of the day following. The uncertainty of the sport gives the greater zeal to the wild-fowl shooter. If he were always sure of success, the excitement and true sportsmanlike feeling would be wanting, or, at all events, materially diminished.

The wild-fowl shooter will do well to observe, that wild ducks, and other wild fowl, when on wing, generally appear to be nearer than they really are ; and being large birds, thickly plumaged, they require hard hitting : therefore take care not to shoot out of range : and remember, that when within range, your chance of killing depends more upon an effective charge of *powder* than on a heavy charge of shot. Your gun should, therefore, be charged with as much powder as it can safely burn : you may then with greater effect, use a smaller charge of shot ; which shot may also be of smaller size than are commonly used.

WILD-DUCK SHOOTING : AND THE HAUNTS AND HABITS OF WILD DUCKS.

In order to achieve success in the sport of wild-duck shooting, whichever branch of it the sportsman may choose to practise, he should endeavour to

make himself familiar with the haunts and habits of that species of wild fowl.

In the first place, it should be borne in mind that the wild-duck species are, for the most part, migratory birds. Many, no doubt, remain with us and breed in the fens and other quiet places of resort, particularly in the neighbourhood of decoy ponds, private lakes, ponds, and other inland waters.

The time of year when wild ducks migrate from northern latitudes, for southern or more genial climes, is about the middle of October, and the migration continues throughout the early part of the month following. During the season of migration, extensive teams of duck and mallard pass over the seas to and across the British Islands. Thousands of them settle in the channels and seas around our coast, if the weather be not too boisterous: in the alternative of which they fly to sheltered bays on the coast, and up broad tidal rivers running down to the sea.

The mallards are usually a little earlier in season in their arrival in this country than the ducks, or some of them at least; as it is frequently found on making a good shot with the punt gun, or from a shooting yacht, with the stanchion gun, at the earliest arrivals, and killing a dozen or two, that they are all or mostly mallards.

The movements of wild fowl are regulated very much by the wind and weather, and by the tempera-

ture of the season. If the winter be very severe and of long-continued duration, they are more numerous, and come to our shores in greater numbers and variety, consequently the sport is so much the better.

It is the habit of wild ducks to fly inland from the sea and broad open waters, at about sunset, and all through the hours of twilight; and an hour or more later if there be moonlight, or even bright starlight, particularly if the weather be very cold. They leave the broad waters in small teams, varying from two or three to twenty, or even fifty, if they are very numerous; but this is only when they have fairly settled in any chosen locality. On their first arrival in very large numbers, they fly much higher in the air and to greater distances, as if on an aerial flight or voyage of discovery. In these flights it is believed that they sometimes completely cross the British Isles, flying from channel to channel.

When once settled upon the coast, they frequent deep open waters by day, but fly to fenny districts, shallow waters, marshes, and other moist, grassy, or muddy places by night, where they obtain their chief subsistence; and if not disturbed, many of them stay there a good part of the next day; but as a rule, they remain there only till daylight or twilight next morning, when they return to the deep waters. And such is usually the daily routine of their habits, except in very boisterous weather,

when they are more unsettled. It frequently happens, however, that pairs of duck and mallard spend the greater part of the day in dykes, reedy pools, and other such attractive feeding places.

Wherever wild ducks find a quiet inland feeding place, they frequent it again and again until disturbed; flying to it quietly at twilight in the evening, alighting in as noiseless and stealthy a manner as possible. Then is the sportsman's opportunity (if upon the alert) of marking them down and making a good shot.

It being, therefore, the nature or habit of wild ducks to feed chiefly at night, and sleep and rest by day, the sportsman must be prepared to find them very vigilant on his nocturnal excursions, whether he goes in pursuit of the sport on land or in a gunning-punt: and notwithstanding that wild ducks sleep in the day time, there are always some of them awake, and apparently acting the part of sentinels. It must not, however, be inferred that they sleep all day, nor that they do not seek their food in the day-time; for they may sometimes be found busily feeding in some favourite haunt at any hour of the day. When a calm intervenes after the weather has been very rough and boisterous for several days, they are apparently tired, and seek food and rest: at such times they are usually much tamer, particularly at sea and on broad open waters, and consequently more easily approachable: but silence and precau-

tion on the part of the sportsman are always indispensable in every branch of the pursuit, especially at night; when, if the least noise or suspicious movement of the enemy be detected by any of the sentinels, a note of warning is given, heads are instantly raised, necks outstretched, eyes and ears open, and however garrulous they may have been the moment before, and however numerous, immediate silence prevails throughout the whole assembly, all of whom know that an enemy is suspected; and therefore every eye and ear are doubly vigilant until a note of reassurance is given, when they resume their dabbings and soon after their confabulations.

GUNS FOR WILD-FOWL SHOOTING.

The shoulder gun for wild-fowl shooting, should be either a No. 8 or a No. 10 if a double barrellled gun. If a larger gauge is used, the gun should be a single barrellled one.

For wild-fowl shooting in the fens a double barrellled 10-bore gun is the most suitable, and quite as heavy as can be conveniently carried. If a breech loader, capable of burning from $4\frac{1}{2}$ to $5\frac{1}{2}$ drs. of powder, it weighs from 9 to 12 lbs., but a muzzle loader of that gauge is considerably lighter. The proper charge of shot is $1\frac{1}{2}$ oz.

Shoulder guns for use on board the shooting

yacht or sailing boat should be single barrelled, 4 bores or 8 bores.

A single 8-bore breech loader, with 36-inch barrel, capable of burning from 7 to 8 drs. of powder, with 2 oz. of shot, weighs about 15 lbs.

A 4-bore breech-loader, with 40 or 42 inch barrel, capable of burning 11 or 12 drs. of powder, with 3 oz. of shot, weighs from 18 to 20 lbs.

The 4 and 8 bores are used chiefly for wild-geese shooting at single birds, or small gaggles too few in number for the stanchion gun. When loaded with small shot, they are also very effective for smaller fowl, as duck and widgeon, in little trips of from five to twenty.

WILD-FOWL SHOOTING IN THE FENS.

Wild-fowl shooting in the fens and marshes is one of the most enjoyable branches of our sport; particularly to those who, through being bad sailors, are unable to appreciate the same at sea and in the shooting-yacht.

In the neighbourhood of the fens, it is not duck and mallard only that are to be met with, but many other varieties of the aquatic species; a circumstance that adds much to the charm of the sport. The best time of day for sport in the fens, is early in the morning; but it may be pursued with more or less success throughout the entire day, according

to the locality, the state of the weather, and other circumstances.

Shallow dykes, small pools, rivulets, and other wet lying grounds, where sedges, rushes, reeds, or other such cover grow, are favourite resorts of the wild-duck species. They seek such places at twilight and on moonlight nights ; and if it be a quiet and retired locality, they sometimes remain there till daylight next morning, and even throughout the greater part of the day.

The sportsman with his dog and gun should tread the fens as quietly as possible : for wild fowl are always watchful of the enemy, and never require much pressing to induce them to rise from the brook or other fen cover, but will take wing on the least suspicion of danger. A good retriever should always accompany the sportsman in the fens ; as many a bird will drop to the sportsman's charge on the wrong side of the dyke, which it will be the duty of the dog to retrieve.

The most suitable sized gun for this branch of the sport is a double-barrelled gun of 8 or 10 bore.

TEAL SHOOTING.

The teal, the smallest of the duck species, beautiful in plumage, and choice in flavour, is well worthy of the sportsman's pursuit.

Teal are the earliest wild fowl of the season ; generally fairly abundant in the month of September. Their haunts and habits are very similar to those of the wild duck : when in search of the one, the sportsman frequently meets with the other. Teal are, however, much tamer in their habits than wild ducks ; particularly on broad open waters, where in the months of September and October they may be met with in small springs, or broods of six or eight, or more. They afford the punter-sportsman very fair chances, as they generally sit tolerably close together ; so that the whole spring may be killed at a shot, with a small punt-gun loaded with a charge of No. 6 or No. 7 shot.

They are not nearly so wary in their nature as widgeon and most other wild-fowl ; and may therefore be approached under ordinary precautions, wherever found.

Although teal may sometimes be met with in large numbers on broad open waters, they are nevertheless birds which disperse themselves considerably over fen lands, marshes, pools, rivulets, and other haunts of the aquatic species ; and so afford the sportsman excellent sport with his shoulder-gun and retriever. In the fens they may generally be flushed singly, when, notwithstanding that they are very fast flying birds, they offer so fair a chance when they first get up, that a mere ordinary sportsman may shoot them with small shot, No. 7

or No. 8. If they rise out of range they should be marked down, as they seldom fly far when flushed in the locality of fens and marshes, unless it be early in the morning, when they are more likely to make a longer flight.

PLOVER SHOOTING.

Amongst the many varieties of fen birds, the plover species are objects of considerable attraction, and sometimes afford the sportsman very fair sport.

There are three well-known varieties of the plover: the most prized is the golden plover, a bird not only of beautiful plumage, but of choicest delicacy for the table. Next to which is the grey plover: the lapwing, or pewit, being the least prized.

The habits of plovers are chiefly gregarious; and if by chance a grey plover becomes separated from its fellows, rather than remain long in solitude, it will join a flight of stints or oxbirds until it finds its more natural companions.

The golden plover is a bird of greater rarity than the others, and is more frequently found singly than the grey plover.

The favourite haunts of plovers are fens, marshes, oozes and savannas, the margins of tidal and other rivers, and lakes, and sometimes meadows, cultivated fields, and upland pastures. They are

also fond of bare ground, closely-fed lands, and moors.

The flight of grey and golden plovers is usually at a low elevation, but very rapid. They are, therefore, by no means easy shots, even to an experienced sportsman. Indeed, a single grey or golden plover in full flight, although passing within twenty yards of the sportsman, is about as difficult a shot as any to be met with ; even more so than a snipe. Their mode of flight, though graceful and rapid, is darting and impulsive ; generally *descending* at the moment of suspicion or danger.

When in large numbers, they sometimes skim the fields and marshes only two or three feet above the ground ; and, notwithstanding the rapidity of their flight, they keep together with great regularity ; but if fired at, they all dart down towards the ground with instantaneous motion, as if to dodge the shot, skimming the surface with increased rapidity for two or three hundred yards : then again ascending, they scatter themselves in all directions.

These antics of flight are peculiar to the plover. Oxbirds, however, sometimes do the same when fired at on wing.

Plovers are restless birds, and seldom remain long at the spot where they alight. When seen at a distance on wing, the sportsman should stand as motionless as possible : by so doing, they will sometimes pass, unsuspectingly, close to him, and

so afford an excellent opportunity for a shot. Some sportsmen make no scruple about firing into the "thick" of a wing of plovers, and killing as many as they can: plovers being birds that are "here to-day, and gone to-morrow;" and they are so restless and wary, that but few shots can at any time of year be had at them.

A good shot may sometimes be made at plovers by hiding under the shelter of a fence or hedgerow when they are seen flying across the fields.

The lapwing is a very different bird to those of the grey and golden plover. Lapwings might not inappropriately be termed flap-wings: their mode of flight always assuming a regular and measured stroke or flap of the wings. Their species can always, most unmistakably, be made out when on wing, though at a very long distance, by that peculiarity in the stroke of the wings; and when near-by, by the familiar note "pee-wit!"

A snipe gun, or small-bore partridge gun, and small shot, are best for plover shooting.

FLIGHT-SHOOTING.

There is no branch of the sport of wild-fowl shooting that so thoroughly tests the skill and promptitude of the sportsman as flight-shooting.

It is the habit of some species of wild-fowl,

particularly the wild-duck species, to leave the broad open waters of the coast at twilight in the evening, for their inland haunts: and to return again at twilight in the morning. The sport of shooting them as they fly to and fro on those evening and morning excursions is termed "Flight-shooting." When the birds are numerous it is very fine sport: but their flight is so rapid, consequently the opportunity so momentary, that they are even more difficult to hit, and much harder to kill, than driven grouse.

They come, not in long teams, but in small flights of from two or three, to twenty or more.

The sportsman should first ascertain by watching at twilight on several evenings, the usual or most frequented route or line of flight taken, and then place himself behind a bank, wall, or other place of concealment facing the route of approach; and with gun in hand, cocked, and ready for instantaneous action, watch their approach, and fire as soon as they come within a range of 30 or 35 yards, aiming several inches in advance of their heads. If you kill one it will fall close at your feet. Be smart, and fire the second barrel just as they are passing over head, or immediately after they have passed. Single out your birds, and fire well in advance. Wild ducks do not usually fly higher than about five or six yards from the ground when passing over marshes and lowlands at flight time.

As the darkness gathers, the birds will probably not be seen until just as they come within range; when, of course, still greater readiness and promptitude are required. But if it be a very calm night, the coming of the fowl may be detected by the rushing noise of their wings; which may sometimes be heard from fifty to one hundred yards off.

The flight-shooter should be on the watch early, half an hour or more before sunset, and should make careful observation of the various tracks or lines of flight of the birds. It is difficult to lay down any reliable rule for the guidance of the sportsman as to the probable route, as so much depends on the locality. But at flight time most of the birds follow the channel or track of rivers from the sea, many miles inland; others having discovered a sheet of fresh water in another direction, branch off towards it by the lowest-lying lands, following a valley, if there be one.

The wild duck species almost invariably keep to the lowlands, flying over marshes, or following streamlets far inland: but grey-geese fly much higher in the air, and are usually earlier in their evening flight than wild-ducks. Grey geese are generally far out of range of the shoulder-gun when flying over land at flight-time.

There are of course many different routes of flight in every wild-fowling locality. The sportsman should therefore change from one to another occa-

sionally, but always standing in a place of concealment, behind some screen, temporary, or otherwise. His sport will depend mainly on his discretion and good judgment in placing himself under the track of the birds as they pass overhead.

The shorter the days, colder the weather, and keener the frost, so much the better for the flight-shooter, as the birds are then more numerous, restless, and prone to fly inland.

The necessity for firing well in advance of the birds at flight-time cannot be too firmly impressed upon the young sportsman; for the flight of wild fowl at those hours is so rapid that very fair chances are frequently missed through not making sufficient allowance for rapidity of flight on presenting the gun. At birds 20 or 30 yards high, hold your gun from one to two feet ahead, according to the rate of flight. The suggestion as to firing forward, or in advance of the bird, must be the more strictly observed if you have allowed the bird to pass fairly overhead; in which case considerable promptness is requisite, or the bird will be out of range, so rapid is the flight of the wild duck at the hour of flight-time.

These latter observations apply chiefly to birds passing directly overhead; if to right or left on passing, more or less allowance should be made, according to the range of the bird, and the angle or line of its flight.

STALKING WILD FOWL, AND SHORE GUNNING
GENERALLY.

Among the various modes of pursuing the sport of wild-fowl shooting upon the land, none are more popular with some people than that of stalking the birds from some hiding place, as they sit upon the water or feed by the margin of lakes, rivers, broads, pools, and other such places. Those who pursue the sport in that form are termed by aquatic sportsmen "shore-gunners." The chief skill to be acquired in this branch of the pursuit is that of stalking the birds; and in order to do so with success, the stalker must not object to occasionally crawling upon hands and knees a few hundred yards, over mud, snow, ice, or whatever kind of surface the weather may have made of the intervening space between the position of the sportsman and the objects of his pursuit. To an indefatigable shore-gunner, however, such are mere trifles, which, he knows full well, are cheerfully encountered every day by the deer-stalker. In many branches of the sport of wild-fowl shooting, the shore-gunner is frequently exposed to various trying ordeals of wind and weather, such as lying in ambush behind blocks of ice and snow for an hour or two at a time; or in a pit, trench, or other place of concealment on the beach. Therefore, unless prepared to face all such obstacles with hardihood and indiffer-

ence, he had better not venture on such pursuits, as his success depends more or less upon his own perseverance and endurance under various obstacles and severities of weather.

When the surface of the country is deeply covered with snow, the shore-gunner should wear white outer garments, which will render him an object of far less fear and avoidance in the eyes of the aquatic species, than if clad in dark or sombre garments: and when wild fowl are flying near, he should either lie down on the beach or stand perfectly still: the probabilities of their coming unsuspectingly within range will then be much greater.

Favourable opportunities for pursuing the sport on the coast are when snow and sleet are falling, as wild fowl then usually fly much lower in the air: and in hazy weather they approach the coast and fly over the shores, apparently without suspicion.

The breaking up of a long hard frost is also a very favourable opportunity for pursuing the sport, as the birds are then more approachable.

During very severe frost they are restless; frequently taking to their wings and shifting their places, particularly after noontide.

A tolerably heavy gun, about eight or ten bore, and carrying a good cartridge, will be found best suited to this sport, as the shore-gunner sportsman must be prepared for goose, duck, widgeon, in fact

any and every variety of the wild-fowl species, from a teal to a wild swan.

The ancient stalker employed sometimes a live stalking horse, at others, an artificial one. Most of the old sporting works, such as Blome's Gentleman's Recreations, Markham, and others, give descriptions with illustrations of artificial stalking horses. In one of the old editions of Blome, is an engraving of two sportsmen with guns inside a light canvas frame painted and made to represent the body of a horse, with switch tail and head down, as if grazing: the legs of one sportsman forming the fore legs of the horse, and those of the other the hind legs. In close proximity with the contrivance are represented a number of curlews, at which the sportsmen are pointing their guns through the canvas side of the artificial horse. The idea seems puerile and absurd. Ancient French fowlers are said to have used similar contrivances with a cow skin, called *la vache artificielle*; also a walking hut, or *la hutte ambulante*; illustrations of which may be found in most of the old French works on Fowling; some of which have been copied into the modern ones.



THE WILD FOWL SHOOTER.

WILD-FOWL SHOOTING WITH PUNT AND PUNT-GUN.

The successful enjoyment of wild-fowl shooting upon the open waters, is to be found in that branch of the sport which is pursued in the single-handed paddle punt, with punt gun firing about sixteen ounces of shot at a charge ; or in the shooting yacht with stanchion gun, firing from $1\frac{1}{2}$ lb. to 2 lbs. of shot. All other systems sink into insignificance, when contrasted with these, the legitimate and favourite pursuits of all who thoroughly appreciate the sport.

The system as pursued with punt and gun, is one that requires careful observation, training, and experience. Bearing in mind that the primary feature of the punter's art consists, first, in the accurate adjustment and true elevation of the gun upon the fore part of the punt, before starting upon the expedition ; and secondly, in that of contriving to get within range of the objects of the pursuit as they sit upon the surface of the water, exposed to view on every side, and generally without screen or shelter of any kind, for either fowl, punt, or punter.

The sportsman must stealthily creep upon them in his little gunning-punt, with gun at proper level, and shoot them as they sit upon the open waters. And such is a task of no mean pretensions, but one requiring considerable practice in the use of

the hand-paddles, and no small amount of skill besides, whether pursued by daylight, moonlight, or starlight.

In the first place, it is nearly useless to attempt such sport in what are termed "double-handed sculling punts," *i.e.*, punts carrying two persons, one of whom attends to the gun, whilst the other sculls the punt ahead, with a single long-bladed oar. The sportsman must "paddle his own canoe" if he would be successful in this attractive sport; for wild fowl are vigilant birds, and will rarely sit the approach, within range, of a large double-handed sculling punt.

The proper use of the hand-paddles, is an art that is neither easily nor readily acquired. It demands a great deal of practice, with no end of toil and endurance. But when once thoroughly acquired, so as to be able to use the paddles with that power and ease that are essential to success, the advantage of the system, over all others, of drawing near to fowl on the open waters will be abundantly apparent.

Under some circumstances of wind and tide, paddling is severe work. Many give it up in despair, and take to large double-handed punts.

The punting varies in some districts: for instance, in a country where the shooting haunts are intersected here and there with little islets, tufts of grass, reeds, withies, mounds, or other screen, a

punter seldom finds much difficulty in getting well up to the fowl. And although such cover is the exception rather than the rule, there are many such, though usually in districts within the domain of private property.

In such cover, a small punt-gun answers every purpose, as, with ordinary precautions, a practical punter can generally be pretty certain of a shot.

One of the leading characteristics of the successful punter's art is that of approaching the fowl without any perceptible motion of the punt. Any wriggling about, the effect of sculling the punt ahead, is certain to attract their attention and excite their suspicions, by showing them that the punt is a thing of life—an approaching enemy. Wild duck and mallard, as also widgeon, brent geese, and other fowl are a wary and suspicious species, and the punter cannot be too cautious in his method of approaching them if he hopes to get within range.

It is a cardinal rule in the art of shooting wild fowl in large numbers from a gunning-punt, that the gun be placed as low down in the punt as possible, so as to sweep the surface of the water at its most deadly level: the muzzle of the gun being no more than five or six inches from the surface. But in the double-handed and half-decked punts this rule is disregarded. Those long, broad, and flat-bottomed punts, which are built for extra heavy breech-loading guns, usually carry the gun

on a swivel, at an elevation of from twelve to eighteen inches above the surface of the water; consequently both punt and gun are formed and rigged upon erroneous notions, so far as surface shots are concerned; or rather in ignorance of the rudimentary principles of the punter's art.

So rigidly is the rule of low elevation carried out among the practical punters of my acquaintance, that even in our sea-going punts, which we take out to sea with us on board the yacht, and launch in calm weather; and which are built rather higher at the sides and a foot or more shorter than those we use in smooth inland waters, the punt-gun is snugly laid in a groove on the fore part of the punt, in order to keep it down to the proper level; and no part of the barrel is visible above the gunwales on a side view. The greater safety of the craft is thereby ensured, as well as the more destructive effect of the charge when the gun is fired into the closely packed ranks of fowl as they sit upon the water.

Any punt-gun that is so heavy and unwieldy that it cannot be shipped and unshipped by the punter alone, without assistance, is not only unfit for the single-handed gunning punt, but it endangers the safety of the punter himself and his whole equipment, as every man of experience knows who has ever encountered rough weather and broken water when out in a gunning punt.

It constantly happens that the gun has to be

hauled inboard, and the muzzle end tipped up to an angle of twenty or thirty degrees, as a precaution against spray and broken water finding its way down the barrel. And sometimes, in order to ensure the safety of the craft, it is necessary to shift the gun to the stern of the punt. Moreover, it is a common practice so to place the gun, where one has to row some distance to the haunts of the fowl: and then on arriving at or near those haunts to shift the gun into its place and position, with the barrel lying low upon the fore-part of the punt in readiness for a shot.

But if the gun is so heavy that the punter cannot lift it, he is thereby placed in a very perilous position, if far away from assistance.

Punt-guns carrying from half-a-pound to a pound weight of shot at a charge, are most suitable for single-handed paddle punts. One carrying about 12 oz. is quite large enough for a novice.

Such a gun, even as a muzzle-loader, is a weighty weapon to carry in an elevated position, on the fore part of the punt: but with the weight of the punter himself in the aft part, the punt may be properly trimmed and used with safety, and the gun with effect.

A single-handed punt is, however, but a fragile craft, easily upset in careless or incautious hands, particularly if one of the ordinary flat-bottomed punts. It should not, therefore, be overburdened

with too heavy a gun. And no one should venture on the pursuit until he has had some training and experience in a boat of the kind, and in the use of the hand paddles for propelling the same from a prostrate position, lying at full length upon his stomach and chest on the floor of the punt.

To the novice this will be found laborious work. It must, however, be thoroughly mastered before even moderate success should be expected.

A man with long arms and good muscular strength soon acquires the tact. But however strong, it requires a good deal of practice. Bearing in mind, too, that the punter must keep his head down, and his whole body entirely out of sight of the birds; and must work the punt ahead as silently, and with as little visible motion as possible. For if the fowl detect the slightest noise or movement, their suspicions are immediately aroused, and in all probability the punter's chances, on that occasion at least, are gone, as the birds soar up into the air and overlook his operations, and so confirm their suspicions. After which they become more wary of him when next he attempts to put his art in practice.

For an amateur punter I should recommend a gun about $1\frac{1}{4}$ inch bore or $1\frac{1}{3}$, with barrel about 7 feet in length, stout at the breech-end, so as to be capable of standing a charge of $2\frac{1}{2}$ oz. of powder, and 12 oz. of shot. The weight of such a gun, if a muzzle-loader, ought not to exceed a $\frac{1}{2}$ cwt. If a

breech-loader, it would probably weigh at least 75 lbs.

With such a gun properly adjusted at a low elevation, in a single-handed paddle punt, the amateur will find, when he has become proficient in the use of the hand paddles, and has acquired the art of approaching birds on open waters, that he will be able, in the course of the season, to bag at least ten times as many birds as the amateurs with their double-handed punt and gun of 150 lbs. weight, with 9 feet barrel, $1\frac{3}{4}$ inch bore, fitted with elevated swivel, and standing some 10 or 12 inches above the surface.

In fact, the execution to be done with the punt-gun recommended, will astonish no one more than the shooter who has been accustomed to a larger and heavier gun.

The punt-gun proper, as used in the single-handed gunning punt, should never be affixed to a swivel. The barrel may rest in a swivel, to facilitate its use in making a flying shot, but it should not be made fast to it. The rope breechings, if properly adjusted, are amply sufficient to check the recoil without fastening the gun to either swivel or stanchion.

Except for the purpose of aiding the punter in making a shot a little to right or left at birds on wing, a swivel is useless in a paddle punt.

The punt should always be kept end on at sitting birds, and the gun so fired. The slightest diver-

gence of the punt is immediately put right by a single stroke, or mere motion, of one of the hand paddles.

It should be remembered that the object is to kill the greatest number of fowl as they sit upon the water: which may be accomplished if the gun has been accurately adjusted to a precise range as it lies upon the fore part of the punt; when, if the fowl are very numerous, a complete lane may be cut through them from 60 to 160 yards—the slaughter being tremendous. But it is obviously impossible to make a successful shot of the kind with a gun lying at an elevation of 12 or 18 inches from the surface; as the charge of shot instead of spreading its destructive effects along a line of 100 yards or more, will only do so at the spot where it strikes, covering only some four or five yards. In which case the result will be that a few birds will be killed, but it will be few indeed, in comparison with the many scores that are cut down by the sweeping charge from a low-lying and accurately adjusted gun.

It is no exaggeration to say that not one amateur punter in fifty knows how to adjust the punt-gun at this deadly and destructive range. And no punter has a fair idea of the extensive power of his gun unless he has seen the havoc made by a skilled puntsman on firing into one of those closely packed acres of widgeon or wild-duck, which sit huddled together upon inland waters in severe weather.

PUNTING BY DAYLIGHT.

In broad daylight the chances of success with punt and gun are far less than on moonlight nights: but the hour of daybreak is a very favourable one to an experienced punter; who, being an early riser, proceeds to the haunts of the birds long before daybreak: when, by listening and watching, he discovers their whereabouts; and by their call-notes he knows their species, and prepares himself accordingly. On these occasions he works his punt towards the east; whereby the first gleams of day-dawn lift the curtain from the waters and expose to view the feathered occupants of the surface, though at a distance of half a mile or more, looking like small black spots, or moving objects: whilst the punter and his movements being in the gloom, are not discernible to the birds; as they would be if he attempted to approach from the east side, and to work to the west.

In broad daylight it is generally best to work from the shore, or along the shore, rather than *to* the shore.

Wind and tide, however, have always to be considered. Punting operations in the neighbourhood of extensive savannas and ooze-beds should generally be conducted on a flood-tide.

Punting among drift-ice floes in a tide-way is

dangerous sport to those who are not well acquainted with the navigation of the place, the time of tide, and depth of water. To the experienced punter, it affords golden opportunities; as wild-fowl are always very numerous in such severe weather, and generally tamer than in open weather, though usually more restless.

The chief danger is that of being hemmed in among the drift-ice, or the punt crushed or injured.

A lee shore must always be avoided when there are ice-floes adrift. In fact, the punter should keep to the windward side of the bay or river, and never attempt to force a passage through heavy drift-ice in so shallow and fragile a boat as a gunning punt.

In severe weather, the inside, outside, and bottom of the punt soon become corroded with ice, which will put the punt out of trim unless removed. It should be thawed off; as any hammering or chipping will cause the punt to leak.

After a severe frost, directly a thaw commences, wild-fowl are less restless: they seem to rejoice at the softening of the surface, whereby their food is more accessible; and being hungry, they will generally allow the punter to come within range.

Many punters watch for the approaching thaw, and when it comes, they look upon it as the opportunity for doing considerable execution with the punt-gun. But if there is much drift-ice about, it

very often happens that the punters fail to recover more than half they kill and wound, if near a tide-way. The dead and wounded birds disappear among the drift-ice before the punter can recover them. It is best to avoid shooting in or near a tide-way under such circumstances.

In the day-time the punter will find, when on open or deep waters, if he chances to fall in with a dabbling of wild ducks, that on first suspecting his movements, they will swim away as fast as they can, keeping their heads and necks down, and their bodies deep in the water. So long as they maintain that attitude, the sportsman, if not within range, may continue his efforts to get nearer to them: but the moment they lift their heads and necks, and raise their bodies from the deep position to a more buoyant one, he should fire if within range; for it is the signal that they are off, as the next moment they turn their breasts to windward and fly.

The punt-gun does most execution if, at the instant of firing, the birds are just opening their wings to fly, or are sitting with their tails to the punter; and the reason is obvious, for the shot finds least resistance from the feathers in either of those positions. The attitude most unfavourable to the penetration of the shot is that in which their breasts are turned towards the muzzle of the gun: or, (as puntsmen say) "breast on."

On returning ashore, the punt-gun should be taken out of the punt and carried indoors, or put on board the yacht in a dry place.

The punt should also (particularly in frosty weather) be brought ashore and laid bottom upwards on a couple of battens under a shed or other cover. If left out in frosty weather, ice will accumulate under the floor of the punt and put it out of trim, besides making it very uncomfortable for the punter when he next uses it.

NIGHT PUNTING.

Night punting, on moonlight nights, by experienced punters is sometimes a highly successful pursuit. It is, however, a branch of the sport of wild-fowl shooting that is seldom indulged in by any but professional punters. A good knowledge is essential, not only of the haunts and habits of wild-fowl, but of the notes, calls, noises and other distinguishing indications of the various species of wild-fowl: for it is chiefly by these that the night punter is guided to the spot where the objects of his pursuit are assembled. Good ears are, therefore, as indispensable to the night punter as good eyes; and neither the one nor the other must be covered up. A man who covers up his ears with ear-flaps or a hood, when in pursuit of the sport of wild-fowl

shooting, is no sportsman. And certainly such a man should never venture on night punting.

The night punter who would be successful, must regulate his movements, as far as the locality will permit, according to the position of the moon, and the reflections of light and shade it casts upon the water. He must never attempt to approach wild-fowl with the moon at his back: if he does they will see him long before he can see them. But by going at them with the "moon on," he will be enabled to see them at a long distance in the glare of light which the moon casts before him; whilst he and his punt will be obscured from their view by being in the gloom.

It is, therefore, always advisable on a punting excursion, to keep on the shady side of the bay or river; and to work *to* the wind, or with a side wind, and in the face of the moon.

Unless the gun be properly "set" the punter has but a poor chance of killing wild fowl at night.

A swivel-fitted punt gun, and indeed any gun that lies at a high elevation on the punt, is wholly out of place for night punting. The gun should be rigged at as low an elevation as possible for shooting wild fowl on the water. But in places where the punter shoots from the water at birds feeding on a mud bank, or other higher elevation than the water-surface, of course the gun must be elevated accordingly.

But when working to birds over mud flats with a flood tide, the gun should remain at its low elevation, and the punter must be cautious not to run in too fast nor to allow the tide to swerve the punt. He must keep it rigidly "end on," with the muzzle of the gun bearing upon the direction from which the call notes come. Bearing in mind that it will not be wise to approach within range until the white water flows all around the birds; which it will do as the flood rises, if he gives it time; and then the black-looking bodies of the whole company, however numerous, will be as clearly portrayed upon the white surface of the shallow water as if painted on a sheet of white canvas. Then is the time to draw cautiously within range, if the tide has flowed sufficiently to float the punt; otherwise the punter must rest on his paddles a few minutes longer, before he embraces the golden opportunity.

WIDGEON—THEIR HAUNTS AND HABITS, AND THE MODE OF SHOOTING THEM ON THE OPEN WATERS.

As regards wild-fowl shooting with punt and gun, there is no bird of the wild-fowl species that offers fairer sport than the widgeon: nor one that is more numerous on and about the English coast throughout the entire winter, though in far greater numbers in severe weather. The favourite haunts

of widgeon are the broad, muddy flats, oozes, and savannas of tidal rivers, bays, and inlets of the sea : upon which, when the tide is out, they find abundant and fattening food, in the spawn or small spat of the periwinkle and other mollusca ; much of which is found clinging to the growing seaweed upon the oozes and flats before mentioned.

The widgeon although migratory, is a bird of local habits : for instance, when a company of widgeon have once taken to frequent any particular river, or broad, where plenty of food is to be had, they will continue to do so during the whole of the winter season, be their numbers ever so numerous ; and this too although their ranks be much thinned by the artillery of the punters, and notwithstanding that they pursue them by night as well as by day. They become, however, more and more wary and difficult of approach as the season advances ; and the punter soon finds that having once made heavy slaughter among them, it will be many a day ere he can obtain a second chance of thinning their ranks when in a numerous company : but when they are scattered in small companies he will sometimes find less difficulty in approaching them.

The punter has to pursue different tactics with widgeon to those he uses with duck and mallard. The latter, when in deep water, will sometimes lead him a sharp chase ere he can overtake them. But widgeon, on the contrary, place no reliance on their

swimming capacities : being birds of very powerful flight, they take to their wings immediately on sniffing danger ; rising almost perpendicularly from the water.

The punter who would approach them in deep water must, therefore, use his best skill in paddling his punt towards them ; for they are a very vigilant species, quickly detecting any bungling or incautious movement of the punter, or of his punt, long before he approaches within range.

The best opportunity of getting at them is on the flood tide, just as it lifts their buoyant bodies from the feeding grounds, or as soon as there is water sufficient to carry the punt within range : when, if all goes well with the punter, the flood tide will so far assist in carrying the punt ahead, that he may almost imperceptibly steal upon them and make a very profitable shot, if they are assembled in large numbers.

Widgeon afford the night punter the finest sport of all in some localities : as more than any other wild fowl in the night time, they frequent saline broads, bays, rivers, and other such waters about our coasts.

They are readily distinguishable at night, by their pretty piping call-note, “ wheow ! ” “ wheow ! ” so familiar to every punter and other wild-fowl shooter of experience.

THE GUNNING, OR HAND-PADDLE PUNT.

The hand-paddle gunning-punt is the craft, of all others, in which the greatest amount of execution may be done amongst the feathered occupants of the waters.

Gunning-punts are of various forms, some of which are exquisite models of the boat-builder's art, whilst others are of homely and grotesque construction; some of a coffin-like shape, some with upright sides and pointed stem and stern, others with flaring sides and square stern. Some are semi-flat, others entirely flat bottomed, particularly the old fashioned ones. Some are entirely open from stem to stern; but the majority are covered in at the forepart only: others have the fore half and stern covered in, and have besides, covered water-ways on each side, but these are chiefly large double-handed sculling punts.

In some respects too, gunning-punts differ in form according to the locality or nature of the waters in which they are used. But they are to be met with in some form or other in every locality where wild-fowl resort.

There is therefore great variety in the form and construction of the gunning-punt.

Of the modern forms, the most approved is that which is known as the "Folkard gunning-punt," the

invention of the author of "The Wild-Fowler." * This favourite form of craft for wild-fowl shooting is a single-handed paddle punt, clench (or clinker) built, with rounded sides, but as flat in the floor throughout as possible, though not flat-bottomed; but with a broad, solid, camber keelson; whereby the latter stands from two to three inches higher at stem and stern than amidships, after the model described, with dimensions, &c., in the work alluded to. †

The Folkard punt is considered to be the safest, most buoyant, and altogether the most improved form of gunning-punt that is known. It has besides, steadier bearings than the flat-bottomed punts, is far more sea-worthy, and less liable to drift to leeward. It also possesses another very great advantage—it may be propelled with the hand paddles faster, and with far less labour than any of the flat-bottomed forms of punt; which, to a practical punter are very important advantages, particularly when punting to such fowl as wild-duck, brent geese, and some others which swim away as fast as they can on suspecting the enemy; and then it is only by gaining upon them that you can get within range; a difficult

* This must not be confounded with the name of a writer in "The Field" newspaper, who appears to have assumed the title of Mr. Folkard's work as his *nom de plume*, and writes under the signature "Wild-Fowler."

† "The Wild-Fowler," by H. C. Folkard, Esq., page 120 (3rd edition).

and laborious task with a sluggish, flat-bottomed punt. But with one of the kind recommended, which may be worked ahead very swiftly with the hand-paddles, you may gain upon the birds hand over hand. The punt glides over the surface with so much buoyancy and so little disturbance of water at the bows, that the toil of punting is, under such circumstances, reduced to a minimum. Whereas a flat-bottomed punt works heavily on the hands of the punter, and causes so much displacement upon the surface, and so great a disturbance of water at the bows, that it alarms the birds; and it is obviously toilsome and laborious work to move so sluggish a craft ahead with the hand-paddles.

It will be found, however, that not one boat-builder in a dozen knows how to build properly a Folkard punt. Many have made the attempt, and have turned out crank and unsteady forms of craft, with bottoms more like a Rob Roy canoe, or a small wager boat, than a gunning-punt on the model recommended.

The bottom of a Folkard gunning-punt resembles in some respects (though slightly) that of a South Sea whale-boat without a keel; and instead thereof, a very broad, flat-shaped keelson: being so built, it is not very easily capsized; and the form of the bottom gives greater stability, speed, and buoyancy to the boat, with the least possible displacement of water. If properly built, it draws less water than

an ordinary flat-bottomed punt: a great advantage when paddling to fowl over the ooze on a flood tide.

And being round-sided, with the top strake and gunwales slightly tumbled inboard, it casts no dark shades upon the water in the gloaming, as flat-bottomed punts do; and having steadier bearings, there is less tendency to drift to leeward in a breeze, or to become unmanageable in a tideway. Moreover, when it is required to launch the punt over a mud flat there is no flat-bottom to suck the mud and stick to the surface, and so to make it toilsome and laborious work. The punt recommended may be launched over the mud with the greatest facility.

In fact I am perfectly certain that no experienced punter who has ever used a properly constructed gunning-punt on Folkard's model, will ever again resort to a flat-bottomed one. The only objection is that they are of necessity far more costly than flat-bottomed boats, by reason of the much greater time, skill, and workmanship required in building them.

The breadth of the hand-paddle gunning-punt, of whatever form, should in all cases, be subservient to the reach of the gunner: usually from 2 feet 6 to 2 feet 10, according to the breadth of shoulder and length of arm of the punter.

The hand-paddles for the gunning-punt should be about 2 feet 6 inches in length by 3 inches in width.

The blades should be of hard heavy wood—as English oak, thin at the lower ends, but thick at the top where they are let into light willow handles. The object of making them of hard heavy wood is, to facilitate their use in the hands of the punter, and to enable him the more easily to keep



HAND-PADDLES.

them straight down in the water and use them with greater effect. The lower ends should be forked and shod with copper of sufficient weight to cause them to stand nearly upright in the water with the handles above the surface. If well made and the toes and handles properly fastened to the blades, they are very durable and will last many years.

With such paddles, punting is far less laborious than with those made of light wood: the latter, by reason of their buoyancy and natural tendency to come to the surface, are troublesome to work, causing an inconvenient strain upon the wrists in order to keep them straight down in the water.

The paddles should either be strung together by a few yards of small ratline, extending across the punt, or they should be strung and fastened one on each of the inner sides of the punt, so that in either case, when dropped in the water at the moment of firing the gun, they may not drift away.

In shallow water a setting pole may sometimes be used instead of the paddles, if the bottom be firm, but if soft mud or sand, the paddles are always to be preferred.

Undoubtedly the greatest success attainable in wild-fowl shooting, is with the single-handed paddle-punt and punt-gun: all other contrivances sink into insignificance when contrasted with the splendid success which attends the paddle punt, in the hands of a practical and experienced man. And it is, besides, the most sportsmanlike mode of pursuing the sport on the open waters.

To ascertain the *trim and bearings of the punt*, the punter should lie down at full length in the punt on the water, as if paddling or "setting" to birds; the punt-gun being in its place on the forepart of the punt, the ammunition box at the stern; the anchor, painter, oars, and other accoutrements, also the small double-barrel gun for stopping cripples, all being in their proper positions ready for use in the punt. If the punt is too much by the head, the punt-gun must be drawn inboard a few inches, and the punter himself will have to move

a little farther aft. If the punt is too much by the stern, the reverse of these movements must be resorted to ; and the exact trim, or that in which the punt may be propelled easiest and fastest, when so laden, will soon be ascertained.

PUNT-GUNS.

With regard to breech-loading punt-guns, it is not every system of breech-loading that can be successfully applied to the punt-gun.

The most useful is that in which the gun may be charged with the greatest facility as it lies upon the forepart of the punt, without shifting or moving the barrel.

There are several applications of the breech-loading system to punt-guns, in which that mode of breech-loading is successfully carried out. But the Lefauchaux or drop-down system, the favourite form of breech-loading as applied to shoulder guns, is wholly inapplicable to a punt-gun. The latter may be made with a falling or drop-down breech, but not with a drop-down barrel. And even with a drop-down breech the fall must be limited, bearing in mind that a gunning punt is but a shallow craft, only 4 or 5 inches deep amidships. There is therefore no room to spare on opening the breech : and any system by which the breech end of the barrel

has to be propped up for reloading, is both dangerous and impracticable in the gunning punt.

It is necessary to wipe out the punt-gun with a ball of soft tow, after each discharge, before reloading. But as to several of the breech-loading punt guns I have seen, this cannot be done at the breech end.

The application of the breech-loading system to punt-guns has added so considerably to the weight of the gun, that it has led, as a natural consequence, to the general use by amateur punters, of large double-handed gunning punts; no ordinary sized single-handed punt being capable of carrying, with safety, the heavy breech-loading guns that are now made for firing 3 or 4 oz. of powder with 1 lb. and upwards of shot at a charge.

The punt-gun for the single-handed punt should in no case exceed the weight of 70 lbs. A muzzle-loader of that weight, an inch and half bore, if well made, will bear a charge of from $3\frac{1}{2}$ to 4 oz. of powder, and will throw 16 oz. of shot with powerful effect. But no such a charge can be safely fired from a breech-loader of less weight than 100 lbs.

If a gun of the latter weight is placed on the forepart of the single-handed paddle punt, it will put the punt down too much by the head, and consequently put her out of trim, and render her unmanageable when setting or paddling to birds.

Therefore those who would use a breech-loading gun for the single-handed punt, must be content

with one of smaller dimensions, for a breech-loader of the weight of 70 lbs. will only bear a charge of 3 oz. of powder, at the very utmost; and not more than 12 oz. of shot.

Some of the modern breech-loading punt-guns (so called) are not punt-guns at all but stanchion guns, which are wholly out of place in a gunning punt. The proper sphere of action for such guns is the shooting yacht, or the steam launch.

The barrels of some of these guns are 9 or 10 feet in length, and weigh 150 lbs. or more, independently of the recoil apparatus and fittings, which weigh many pounds in addition.

No ordinary punt, such as is used by practical punters, can carry any such a gun so as to admit of its being successfully employed.

If desirous of using a gun of such dimensions and weight for punting purposes, you must have a punt of extraordinary size and burthen to carry it: which involves many serious objections and obstacles to successful and effective shooting.

In the first place two persons are required on board; one to propel and manage the boat, the other to attend to the gun.

And such a punt must either be sculled or sailed: its breadth and dimensions being too great for the ordinary mode of propulsion with the hand-paddles.

Such a punt, by reason of its extraordinary length, is also difficult to manage with a single sculling car

in a tide-way, or in a breeze, and is, besides, too unwieldy to turn about when required ; particularly in a river intersected with narrow creeks and rills.

The gun in such a punt is placed at too high an elevation :—usually from 12 to 18 inches above the surface of the water : so that when fired at birds sitting upon the surface, a few only can be killed, however favourable the range.

A punt with a gun at such an elevation, forms too conspicuous an object for approaching within range of wild fowl on open waters.

The enormous weight of the gun renders the punt crank and liable to capsize unless it be very broad and burthensome ; particularly as the assistance of two persons is required in shifting the gun inboard in rough weather, to prevent the spray and broken water from rolling down the barrel.

And finally, you will not kill one tenth part of the number of birds in such a punt, with such a gun, at such an elevation, as you would in a single-handed paddle punt, with a gun of less than half the size and weight, lying at an elevation of only 5 or 6 inches above the surface of the water.

And it is a cardinal rule in punting, that the nearer the gun lies to the floor of the punt the more destructive is its charge, and the safer the craft which carries the metal.

The advantages of the breech-loading system as applied to punt-guns, have been very much over-

stated by persons more or less interested in the advocacy of that system : and in some instances also by persons whose experience of the art of wild-fowl shooting in the gunning-punt is, according to their own showing, evidently more theoretical than practical, and whose success in the art has, undoubtedly, been of the most meagre description.

The application of the breech-loading system to the punt-gun possesses the single advantage that the gun may be charged and recharged as it lies in position on the fore-part of the punt, without hauling it inboard. Its disadvantages are, however, many and serious.

Breech-loading punt-guns are so much heavier than muzzle-loaders in proportion to the calibre of the gun, that they are not suitable for single-handed punts, as they require the assistance of two men to carry them down to the punt, to lift them in and out of the punt, and to carry them home : a very serious inconvenience to most punters : far outweighing the (so called) inconvenience of shifting the muzzle-loader fore and aft on re-loading, the "difficulties" of which are more imaginary than real to a practical punter.

The condemnation of the muzzle-loading punt gun reaches the climax of absurdity in some of the statements I have seen, to the effect that it cannot be loaded without rowing the punt ashore and getting out upon the land : and that the charge of

powder has to be passed down the barrel by means of a loading scoop affixed to a long rod.

Such statements are, undoubtedly, those of writers who are absolutely inexperienced, not only in the use of muzzle-loading punt-guns, but in the rudimentary principles of punting.

Now, as a practical wild-fowl shooter of upwards of thirty years' experience, who has killed from time to time, probably as large numbers of wild fowl at a shot as any man living; and chiefly with muzzle-loading punt-guns, I am enabled to contradict *in toto* such absurd observations.

Never once in the whole course of my life have I had occasion to run the punt ashore and get out to reload; nor to use a loading scoop to deposit the powder in the chamber. Nor have I ever known a practical wild-fowl shooter who ever did either the one or the other.

I have many times killed close upon a hundred widgeon at a shot, with a muzzle-loading gun firing from $3\frac{1}{2}$ to 4 oz. of powder, and 20 oz. of shot at a charge: with the same gun I have killed more than 50 duck and mallard at a shot; and I should like to see the breech-loader of same bore and weight that could do the like, and be lifted fore and aft and in and out of the punt single-handed.

The only occasion on which I have found any difficulty in re-charging the punt-gun has been very recently, when using a breech-loading punt-gun;

when I had to row ashore to obtain assistance, owing to the laborious exertion required in opening the breech, and in extracting the empty cartridge-case, and safely closing up and securing the breech action after depositing the fresh cartridge in the barrel.

A punt-gun, whether breech or muzzle-loader, that is so heavy that it cannot be charged without rowing ashore is unfit for the single-handed paddle punt: as is also any gun that cannot be lifted in and out of the punt and shifted fore and aft single-handed, as occasion requires.

Those who use guns that are so heavy that they cannot be re-charged without rowing ashore, pursue their sport on erroneous notions, and are not practical punters.

A muzzle-loading punt-gun may be re-loaded in the gunning punt whilst afloat, by a practical punter, with greater facility, and in less time, than most of the breech-loading punt-guns.

As to a loading scoop, the notion originated with Col. Hawker, 70 or 80 years ago, for depositing in the chamber of his gun a charge of fine-grained powder. But no one now ever uses fine-grained powder for the punt-gun. The pebble-grain powder rolls down the barrel as readily as the shot, without any such nonsensical contrivance as the long-handled loading scoop.

Breech-loading punt-guns of small calibre suitable for the single-handed punt may be had of most gun-

smiths. But for my own part I prefer my old friends the muzzle-loaders, because they kill farther and shoot stronger than the others; and may be charged and re-charged without any of the silly difficulties suggested. Moreover, they may be lifted in and out of the punt, and shifted fore and aft, by the punter himself without assistance.

I am as strong an advocate of the breech-loading system as applied to shoulder guns and rifles as most men, and would gladly yield the palm to the system for punt-guns, if it could be effectually applied without the obstacles encountered: but it is a mistake to suppose that because a system of breech-loading answers well for a shoulder gun, it must also do so for a punt-gun.

For a small punt-gun firing from 8 to 12 oz. of shot the breech-loading action may be successfully applied, provided the gun can be readily opened at the breech, the barrel wiped out and re-charged as it lies in position: but the drop-down principle is inapplicable. A properly built punt being too shallow to admit of the working of the falling breech. There is not sufficient depth in the punt to manipulate it, unless the gun itself be propped up on crutches, whereby it would lie at too high a level to be used with effect on large numbers of wild fowl sitting upon the water; which are always the chief objects of the punter, being those in which he makes his most successful shots.

Breech-loading punt and stanchion guns are admirably adapted to yachts, steam launches, double-handed punts, and other large heavy boats ; but the enormous additional weight of a good sound long-range breech-loading punt-gun so overburdens a single-handed paddle punt by putting her so much down by the head and out of trim, as to have hitherto almost precluded the use of such by practical punters.

The expedient resorted to by those who use these heavy breech-loading punt-guns, is that of a double-handed punt: *i.e.*, a punt to carry two persons. The fact being that no single-handed punt is sufficiently burthensome to be capable of carrying with safety such a heavy gun.

The enormous length of some of the double-handed punts, which are built to carry guns weighing 150 lbs. and upwards, adds considerably to the difficulties of navigating and working them ; particularly in a breeze, amidst drift ice, or in a tide-way. But in order to carry guns of such a weight, some of which have barrels nine or ten feet in length, the punt is necessarily very long, and of extra breadth of beam, or the weight of the gun would so depress it at the bows as to put it out of trim and render it unmanageable.

GUN-BREECHINGS, RECOIL-SPRINGS, ETC.

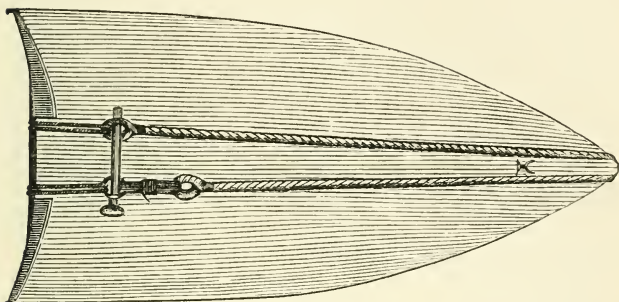
Of course no one would be so rash as to use a punt-gun without proper gun-breechings, or recoil-spring and fittings.

One of the most primitive modes of checking the recoil (still one of the best and most economical) is that by which the gun-breechings consist of a stout rope passed through a sheave-hole in the upper part of the stem-piece *outside* the punt. A thimble is spliced into each end of the rope; the left-hand end of which is looped on to the trunnion or iron bolt, which passes through the stock on that side of the gun; but the right-hand end should not reach down to the trunnion, by about 12 or 18 inches: a ring thimble being fitted to the trunnion on the right-hand side of the gun, the ring thimble and the thimble in the right-hand end of the gun-breechings may then be drawn together as closely as may be required, by means of a stout rat-line, passed several times through the thimbles, and secured in the usual manner, as shown by the illustration on the opposite page.

This excellent mode of fitting gun-breechings to check the recoil of heavy guns in punts, was in use even before Colonel Hawker's time. It is referred to in the Colonel's work on guns and shooting, and also in Mr. Folkard's "Wild-Fowler."

I have used gun-breechings of the kind for many years without a single mishap. The contrivance is a simple one, but I know of none that are safer or better.

After-recoil.—This is caused by the reaction of the gun-breechings jerking the gun forward ; which,



FORE PART OF PUNT, SHOWING ROPE BREECHINGS AND FITTINGS.

unless checked, will, with a heavy charge, throw the gun so far forward as to endanger its jumping overboard.

The simplest plan of checking the after-recoil, is by means of *back-breechings*, which are composed of very small rope, or cordage, less than a fourth the size of the gun-breechings. The manner of fitting them is, by reeving the cord through small standing thimbles secured to the under part of the wooden cross-piece or gun beam, the two ends are

then led up to, and looped over the trunnions of the gun. Quarter inch cordage will be found quite sufficient for the purpose.

When the gun is removed from the punt, the gun-breechings and back-breechings should be drawn together, and secured by a couple of half hitches, so as to keep the gun-breechings taut and prevent their becoming warped. (See the engraving, p. 329.)

The best kind of rope for the gun-breechings, is either shroud-laid rope, or best bolt-rope; not Manilla; as the latter shrinks and expands so much as to alter the trim of the gun from time to time: it also becomes stiff and contorted when exposed to the wet, and liable to be set-fast in the sheave hole. It is besides far less durable than well dressed hemp rope.

When neatly wormed and properly fitted, the bolt-rope gun-breechings always work smoothly, and will serve for many years. For very large guns, the shroud-laid rope is best.

Gun-swivels fixed to knees and cross-beams are wholly out of place in a gunning punt, and such are always attended with the danger of being wrenched off when a heavy charge is fired, particularly when the punt is aground. And no gun shoots well when so fixed.

For the stanchion gun, for use on board a yacht or a shooting boat, there is nothing to equal Colonel Hawker's stanchion-plug and recoil spring. When

properly fitted, of a size and dimensions suitable to the weight and power of the gun, and the spring made of carefully tempered steel, the stanchion guns may be grasped and fired from the shoulder with perfect safety ; and with an ease and comfort known only to those who are in the habit of using them. I have frequently fired heavy charges of five ounces of powder, and a pound and half of shot, at brent geese with great success, from stanchion guns fitted with Colonel Hawker's plug, pivot, and recoil spring ; firmly shouldering the gun the while, and guiding and aiming it by the aid of the hand lever.

With regard to the spiral recoil springs, a common error in fitting them to large stanchion guns, is that of making the springs too short, and on too small a coil, with too stout a thread. They should be made less cramped, on a coil of larger diameter, longer, with more play, and of a smaller thread. I have recently seen several attached to heavy breech-loaders, in which the recoil-spring and fittings were so short and cramped, as to be only twelve or fourteen inches in length : and of so small a size that they would easily pass down inside the barrel of the gun !

With such trumpery springs who can wonder at their snapping, breaking, and flying to pieces, the first time they are used. They would in fact be far nearer the proper size and dimensions if twice that length, and large enough to admit of the muzzle-

end of the barrel passing inside the coil of the spring. The interior diameter of the coil should, however, never be smaller than the interior diameter of the gun. If rather larger, the gun will shoot so much the more pleasantly.

As to the use of india-rubber in the place of the spiral recoil spring, it is a foolish contrivance, wholly unfit for the purpose, as I found many years ago: as it does not afford sufficient play to the stanchion gun: and after very little usage it becomes as unyielding as old leather.

No stanchion gun will shoot either well or accurately unless it has free play on recoil: if cramped and confined in its action it will inevitably throw the shot wide of the mark.

The triggers of stanchion guns, as also of punt-guns of large size, should have a small hole drilled through the tip end of the trigger, for the purpose of attaching the trigger-string, usually a short piece of a leather boot-lace; three or four inches in length is quite sufficient. The object of the trigger-string is to prevent injury to the finger on firing the gun.

Never twist the trigger-string round your finger, nor pass your finger through a loop of the trigger-string, or the probability is, that on firing a heavy charge, the end of your finger will be pulled off, or severely gashed.

Charging the Punt-Gun.—As to the proper charge

of gunpowder for a punt-gun, this must always depend in a great measure, on the power and capacity of the gun itself. But my experience is, that it is useless to attempt to drive a pound of shot, with effect, with a less charge than 3 oz. of powder. With $3\frac{1}{2}$ oz. the charge will be much more effective, if the gun is sound in the breech and has metal sufficient to stand it.

For my smallest muzzle-loader punt-gun, $1\frac{1}{4}$ inch bore, weight 43 lbs., my regular charge of shot was 8 oz., and of powder 2 oz. sometimes $2\frac{1}{4}$ oz. With this handy little gun I have done considerable execution : and though I used it only in mild seasons, or when birds were few and in small flights, I have many times killed with it, from 20 to 40 widgeon at a shot, and nearly as many duck and mallard, and other fowl.

The cartridge cases for the breech-loading stanchion gun, and also for the punt-gun, should be of brass. The paper cartridge cases always burst, bulge, or stick in the barrel, or they split all round just at the top of the charge of powder ; and so the shot is driven all in a lump, which is very undesirable in either stanchion or punt-gun.

The steel cartridge cases are the worst of all : for, unless made of great thickness, they are liable to crack and fly, and injure the inside of the barrel : they rust so persistently that it is impossible to keep them in order : besides which, steel is the most

dangerous metal that can be used for the purpose; the slightest accident in refilling the steel case, by anything brittle striking against the steel will cause it to strike fire and ignite the powder: they are, in fact, self-condemnatory.

The brass cartridge case is, undoubtedly, the greatest modern improvement for breech-loading stanchion guns. A couple of well made brass cartridge cases for the stanchion gun will last for years: and two only are all that are required, one in the barrel and one out.

Wadding for Punt-Guns.—Punched wads whether of felt or cardboard are alike unsuited to the punt-gun, as they are also to the stanchion gun.

Experience teaches that there is nothing to equal the oakum packing, which forms the firmest, most secure and close fitting wadding that can be used for these large heavy guns.

The adjustment and elevation of the Punt-Gun are of more importance than many an amateur would suppose, for unless the gun be placed in proper position on the fore part of the punt, the punter's chances of making an effective shot will be very remote. The raising or depressing of the muzzle, though only to the hundredth part of an inch from the true line, may cause the shot to fly either over the heads of the birds or under water, when at a range of 100 yards or less.

The punt should therefore be carefully trimmed,

and the position of the gun regulated with the greatest care and nicety, by means of an elevating screw rest at the breech end of the gun : the screw working through and under the cross-beam upon which the gun lies. When properly adjusted the gun will throw the charge of shot so as to sweep the surface of the water from 60 to 150 or 200 yards, in line with the muzzle. Experiments should be made until the correct elevation of the gun, and trim of the punt, are ascertained : and when so ascertained should be carefully adhered to. These two essentials are the chief secret of success in slaughtering large numbers of wild fowl at a shot.

If the elevation of the gun be in the slightest degree too high or too low, though a few birds may occasionally be killed out of a large number, the success will be very uncertain and insignificant in comparison with the sweeping execution that may be done with the gun in its true and most effective position.

The endeavour should be to place the gun in the fore-part of the punt, at as low an elevation as possible ; so that the muzzle is not more than five or six inches above the surface level of the water. If only $4\frac{1}{2}$ inches, so much the more destructive will be the charge when fired at a vast number of wild fowl sitting upon the surface.

And the nearer the gun lies to the floor, the safer the craft which carries it.

A common error among amateur punters is that of placing their guns at too high an elevation.

I have seen many such with great heavy breech-loaders, lying at an elevation of 12 or 18 inches above the surface, and working on a swivel. Where a man with a gun so placed kills five birds, a practical punter, with his gun at a low elevation, though only half the size and weight of the other, will kill *five dozen*.

It is the disregard of simple details such as these that causes disappointment to amateur wild-fowl shooters; who, having successfully approached within range of thousands of birds, sitting close together; shoot at them, with a pound or more of shot; but, sometimes, without touching a feather; at others with poor, or very limited results; killing perhaps from five to twelve or even twenty: when, if the punt had been properly trimmed, and the gun correctly placed, they would certainly have killed, at the very least, fifty; but most likely close upon a hundred.

The important essentials of trim and adjustment are far more difficult with double-handed punts, carrying two occupants. In fact the trim of the punt, and correct adjustment of the gun, can never be relied on in such punts. It may be changed unintentionally at any moment, by either occupant shifting his position a few inches, either forward or aft, whereby the gun, as a natural consequence, is

put out of its true line of elevation. Besides too, one of the occupants usually *sculls* the punt a-head, thereby causing it to wriggle about, disturb the surface, and alarm the birds, whilst the other occupant attends to the gun; for such punts are too wide for the more quiet motion of paddling.

In the sculling punt, the handle of the sculling oar, as well as the hand of the sculler, must of necessity be considerably elevated above the gunwales of the punt, whilst working across and across in the act of sculling the boat ahead. They are therefore conspicuous moving objects, calculated to attract the attention of, and to alarm the birds as much, or more, than the wriggling motion of the punt itself.

Double handed gunning-punts are also so heavy and heavily laden, with their two occupants and gun of enormous weight, that it is impossible to propel them with that quiet and imperceptible motion so essential to success in the art of approaching within range of wild-fowl. Moreover, two in a punt are sure to talk, and sound travels farther and faster over the surface of the water than upon land.

Professional punters spurn double handed punts: and few, if any, use such at the present day. The incomparable advantages of the single handed paddle punt being abundantly manifest by every day's experience, in whatever locality the two kinds are used.

Small bunches of wild-fowl from two to twenty or

so, may occasionally be approached in a double handed punt: but those grand flights of fowl which form dark clouds in the air, and cover acres of water when they alight, are only approachable in single handed punts; and by professional punters, and punter sportsmen of skill and experience.

A few years ago there were two double handed punts in use in one of the localities where I shoot. We used to call them "scare-fowl punts:" but both have long since been discontinued, for the reasons that the owners could kill no birds in them; or so few and seldom as not to be worth mentioning. Whilst the single handed punts were bringing in their dozens of pairs of widgeon and duck nearly every day during the fortnight's severe weather of that winter.

On one occasion about the same time, during a severe winter, I saw one of these double handed punts attempting to approach a large company of widgeon. The occupants of the punt fired their large gun (a very much larger one than mine), just as the birds rose *en masse* from the water, but they killed only three. I watched and marked the flight of the birds as they hovered in the air; and saw them settle down in another part of the river, about two miles off. I rowed away for them in my single handed punt: and when within about a thousand yards, I lay down, took to my hand paddles, and paddled briskly towards them; until within fair

range; when I scattered, with $3\frac{1}{2}$ oz. of powder, about a pound (rather less) of small shot (No. 6) amongst them, and fairly cut a lane completely through them; killing seventy-seven. At least that is all I was able to recover. A dozen or more of the "slightly wounded" got into deep water and eluded me.

Tipping and balancing the punt-gun for flying shots.—In adjusting the punt-gun, care should also be taken to place it so that it may be "tipped" by the punter with facility as he lies upon the floor of the punt, when it is required to make a *flying shot* at birds that are wild or restless, rising from the water just out of range for a sitting shot, but not too far for a flying shot. The critical moment for making an effective flying shot at wild-fowl with the punt-gun must be narrowly watched for as they rise from the water; when, by tipping the gun very slightly, so that your aim is a foot or more over the heads of the rising birds, a good many may sometimes be brought down at a shot, though nothing like the number that are killed in a good surface shot.

A gun properly balanced in the punt, should yield to a pressure of three or four lbs.: i.e. so that it may be tipped by the punter pressing his left hand on the stock as he lies on the floor of his punt.

Flying shots are, however, but seldom made from the hand paddle punt, as a good sitting shot is so much more effective.

On board the shooting yacht, the reverse is the rule. The stanchion gun being nearly always fired at the fowl when on wing.

WILD-FOWL SHOOTING UNDER SAIL.

The sport of wild-fowl shooting under sail is best enjoyed in a shooting yacht, a steam launch, or a large half-decked sailing boat: to either of which, the stanchion gun described at page 343 may be fitted in the manner there stated. In a large yacht with good equipments, large stanchion gun, and 8 and 4-bore shoulder guns, the sport is exceedingly enjoyable.

The sailor-sportsman who follows up the pursuit energetically, soon finds however, that his success depends very much on the season, and on the nature of the wind and weather: and that the haunts and habits of the fowl are also much regulated by the same.

In severe winters there is usually abundant sport for the stanchion gun. But in mild and open weather, the sport is more or less precarious: and this again depends in a measure on the quietude or otherwise of the locality; for if persecuted by many gunners, wild-fowl soon become restless and unapproachable.

As regards the large teams of wild-ducks which frequent our shores in winter, it is generally found

that they are fairly approachable early in the season. The sailor-sportsman should therefore have his craft equipped and in readiness in due time, and be on the look-out for their arrival early in November; for, by reason of the warm reception accorded to them in English waters at the present day, they soon become familiar with the cut of the sportsman's jib, and wary of his thundering artillery.

Wild-fowl shooting with the stanchion gun is not therefore by any means an every-day success.

One of the most difficult things connected with this branch of the sport, is that of acquiring the habit of being able to judge with tolerable accuracy as to gunshot range. Distances being so very deceptive on the open water, particularly in light winds. Small objects, as wild-fowl, at 300 or 400 yards' distance, appearing to inexperienced persons to be less than half that range. A very good test as to being within range of wild-ducks is, when, or as soon as you can "see the brown," i.e. the colour of the feathers: or in other words, when able to see the "marking" of the feathers. But so long as the birds look black all over, they are usually out of range; and therefore it is useless to shoot at them. But even these tests are not always reliable, as the colour and markings are obviously more or less distinct, according as the weather is very bright or very dull: though with the aid of long experience, a practical sportsman seldom shoots out of range.

The success of the pursuit of wild-fowl shooting in the shooting yacht, depends also very much on the skill of the "man at the helm," whilst the sportsman stands to his gun. So also on the perfect quietude on board the yacht. The slightest movement above the bulwarks; even a peeping eye is generally sufficient to give the alarm, and cause the whole flight to take wing.

As the birds always direct their heads to windward on rising from the water, it is obvious that the yacht's course must be laid so as to fetch ahead of them on a wind. When, as they rise from the water, the helm should be steadily put down, and the birds will then, if within range, present a fair chance as they cross the bows of the yacht.

Besides, too, the sails of the yacht hide the movements on deck, whilst the birds are far away on the lee-bow.

The finest sport in the shooting yacht is with the large gaggles of Brent (or black) geese, which, in the winter season, frequent the channels and waters surrounding our islands. The sport is however somewhat uncertain, on account of the wary and watchful nature of those birds. Sometimes they are far less so than at others; and with ordinary skill, the yacht may reach within 100 or 150 yards before they take wing. Then is the time to make use of the large gun to advantage, and knock down a dozen or two as they cross the bows of the yacht.

Very much of the Brent goose shooter's success also depends on the kind of weather in which he goes in pursuit of them. It is nearly useless to set sail for them in a strong wind and rough sea: and so also in a very light wind, or when nearly calm. The best weather for the sport is when the sky is cloudy, and a fair or gentle breeze is blowing, and the sea tolerably smooth.

And the same on moonlight nights; when they may sometimes be met with in large numbers on broad saline rivers and estuaries. It should be borne in mind that Brent geese have a very close and thick coating of feathers: they therefore require hard-hitting with large shot, driven by a full charge of good powder. When only winged or wounded, they lead a spirited chase ere they can be captured.

THE STANCHION GUN.

The Stanchion gun for wild-fowl shooting is a gun that is fitted to a stanchion, or a swivel-stock, on board a shooting yacht. To the top of the stanchion a socket is affixed to receive the stem or pivot of the recoil cradle, to which the barrel of the gun is attached and balanced: the gun being also fitted with the spiral recoil spring, the invention of the late Col. Hawker.

The recoil spring should be of such a size as to

suit the power and recoil force of the gun. If in proper proportion, stanchion guns of the largest calibre (2 inches) may be used on board the shooting yacht with perfect safety, so far as the recoil is concerned: they may be turned about on the swivel with the greatest facility, an accurate aim taken, and shots fired in any direction, over either bow of the yacht, and either at wild-fowl sitting upon the water or flying high in the air.

It should be observed, however, that a sitting shot is very rarely made with the stanchion gun: the shot being so much more effective, from a gun at such an elevation, when fired at birds on wing; the golden opportunity is, just as they have risen from the water and are in the act of crossing the bows of the yacht.

To complete the equipment, the stanchion gun should also be fitted with a hand lever, attached to the under part of the barrel just abaft the recoil apparatus. The handle of the lever stands out a little to the left, and reaches as far as the stock of the gun, and 6 or 7 inches below the trigger. The lever is almost indispensable for a properly equipped stanchion gun, and affords the shooter every facility for manipulation without handling the gun itself.

Stanchion guns of 2 inch bore require very large and powerful recoil springs, or the latter will be sure to break on the first discharge. In the

absence of a recoil spring, stout rope-breechings must be used: but the spiral recoil spring is best.

In the place of the stanchion-post, a gun carriage may be used, whereby the gun may be wheeled about on deck. Such a contrivance is, however, only adapted to large yachts where there is space sufficient on deck for moving them.

There are various ways of fitting the stanchion-post. In some yachts the heel of the post is fitted into a stepping attached to the floor of the yacht abaft the cabin entrance: the upper part of the stanchion is then supported by a rope brace, or stay, which receives part of the recoil, and prevents the stanchion being broken off at the foot, or knocked over by the force of the recoil.

In large yachts the stanchion is sometimes fixed in the fore part near the forecastle, so that the gun may be fired over either bow.

In some yachts the heel of the stanchion is set in a stepping on deck, and held in its place by a couple of rope guys. And there are other and various contrivances; but in all, either the spiral recoil spring must be used as well, or, as a substitute, a good stout rope breeching.

Stanchion guns are the largest pieces of wild-fowl artillery that are made. Punt-guns being the next largest.

The gauge of stanchion guns varies from $1\frac{1}{2}$ inches to 2 inches in diameter; the 2 inch gauge

being the largest that is made. The latter weighs fully 200lbs., and is capable of firing 2lbs. weight of shot at a charge. The smaller sized stanchion gun of $1\frac{1}{2}$ inch gauge, fires 1lb. of shot at a charge, and seldom weighs less than 100lbs.

The latter sized stanchion gun is that commonly used on board small yachts, and sailing boats.

A stanchion gun such as is used by practical wild-fowl shooters on board a suitable craft is nearly double the weight of what is, strictly, a punt gun. No single-handed paddle punt can safely carry a stanchion gun.

The most useful sized stanchion gun is $1\frac{7}{8}$ in. gauge; which will bear a charge of $4\frac{1}{2}$ oz. powder, and $1\frac{1}{2}$ lbs. of shot at a charge. Such a gun (being a breech-loader) weighs 150lbs. or more.

Many of the so-called breech-loading Punt Guns, are, in reality, Stanchion or Swivel-stock guns, which are unfit for the ordinary gunning-punt, because unmanageable, on account of the enormous weight of metal about them. The only proper craft for such weighty guns are, the Shooting Yacht, the Sailing Boat, and the Steam Launch.

Of late years breech-loading stanchion guns have been used in large double-handed sailing-punts, decked fore and aft, and at the sides: but as a rule, gunning-punts are seldom found to be suitable for such heavy guns.

WILD-FOWL SHOOTING FROM THE SAILING-PUNT.

The sailing-punt for wild-fowl shooting is, I believe, the invention of Mr. Folkard, the author of "The Wild-Fowler." Sailing boats and half-decked punts for wild-fowl shooting, carrying two or more persons, were used in Col. Hawker's time, but not the single-handed sailing-punt. The form of Folkard's Sailing Punt is a beautiful model of a round-sided but *flat-floored* (not flat-bottomed) little gunning punt, rigged with a settee or a latine sail; and although the punt is intended to carry but one occupant with punt-gun and other accoutrements, it is nevertheless perfectly safe in fine and moderate weather. But as Mr. F. says, "it is not every punt that can be sailed with safety: a punt of a special form and construction is required for the purpose; for so surely as an inexperienced hand attempts to sail an ordinary gunning-punt, so surely will he capsize it. Of all the forms of gunning boats, the ordinary *flat-bottomed* gunning punt is the least safe under sail, and the least manageable."* A flat-bottomed punt can only sail before the wind. In Folkard's sailing-punt, the punter himself is the only ballast required, as he lies along the floor.

* See "The Wild-Fowler," by H. C. Folkard, page 155 (3rd edition), for a full description, with dimensions and other details, for building and fitting the sailing punt.

No doubt, if all punters used sailing-punts, wild-fowl would soon become very shy of them. But when long accustomed to paddle-punts, they are not so likely to suspect one under sail; and so, the author says,—the sailing punter may sometimes steal a march upon them when all the efforts of the paddle-punter are unavailing. In this punt you can tack and work to windward in deep water, and yet sail over shallow flats in 2 or 3 inches of water. When the wind is light and the water smooth, it is astonishing with what rapidity you may run up to a paddling of wild ducks or widgeon in a sailing-punt of the kind. And no one would venture to set sail in so fragile and shallow a craft in rough weather. Indeed, no wild-fowl shooting can be done in a gunning-punt of any kind under such circumstances.

The gun is fitted, elevated, and adjusted to the trim of the sailing-punt in precisely the same manner as for the hand-paddle punt. And there is this further advantage in a sailing-punt of the kind, that it may be used either as a sailing or a paddle punt by one person alone. In fact, that seems to be the chief object of the invention.

A great improvement to the sailing-punt is, the addition of a small galvanized iron centre-board, for sailing on a wind. The best place for it is about three feet from the stern post: in which position, the upper part of the keel case is secured

by a small beam crossing from gunwale to gunwale. And when the punter is lying upon the floor of the punt, the keel case stands between his feet. With the keel case in the position described, it affords the least possible inconvenience: in fact, no inconvenience at all. But if placed in the fore part of the punt, under the gun-beam, the centre-board will cause so much fore-gripe, that the punt will not steer properly; and therefore can only be sailed by the punter sitting in the very stern of the punt.

A FEW STRAY HINTS TO WILD-FOWL SHOOTERS.



Never station yourself in any position in which the colour of your garments is in direct contrast with the colour of everything else around you: for by so doing, you at once make yourself a conspicuous object, whereby wild-fowl will detect, turn tail, and avoid you.

Avoid too much outer clothing, as it impedes the free and active use of the limbs.

A practical wild-fowl shooter keeps himself warm by exercise, whether on land or in a gunning-punt.

Never cover up your ears when wild-fowl shooting, whether by night or by day, and whether on land or water.

It is as important to have the ears wide open as the eyes. In fact, you might almost as well cover one as the other, when in pursuit of wild-fowl at night.

No practical punter ever covers up his ears, be the weather ever so keen.

A man who covers up his ears when wild-fowl

shooting, is neither a sportsman nor a wild-fowler, but a dangerous companion.

For punting, use thick worsted gloves or mittens, in preference to leather, it being almost impossible at all times to avoid getting the hands wet when punting, even in very cold, freezing weather: and leather shrinks, and is cold and uncomfortable to the hand if in the least wet. But a worsted glove may be wrung when wet, and put on again immediately; and will keep the hand warm, though the glove be still damp.

It is a fundamental rule in punting that the nearer the gun lies to the floor of the punt, the more destructive will be its charge, and the safer the punt which carries it.

Never twist the trigger-string of your punt-gun round your finger, nor pass your finger through a loop of the trigger-string: if you do, the probability is, that on firing a heavy charge, the end of your finger will be pulled off, or so severely gashed, that you will have cause to regret the indiscretion.

PIGEON SHOOTING.

Pigeon shooting, as practised within the Hurlingham enclosure and at some other shooting clubs in town and country, is a very attractive recreation, particularly to those who desire to excel in the art of killing birds on wing. Its patrons may therefore be found amongst sportsmen of every class; and its votaries among those who have acquired fame and reputation in the use of the gun. It would not perhaps be wise to examine with too close a scrutiny the charm it possesses, nor to seek with too much diligence to discover in what that charm consists. Suffice it to say that the spirit of emulation is at the root of it all.

In pigeon shooting matches as in matches with the rifle, and indeed in all other popular diversions at which gold and silver cups, stakes and other intrinsically valuable prizes are offered for competition, there is always a keen rivalry.

Pigeon shooting matches at the present day are attended by sportsmen of the highest repute and by prize-shooters, and champion prize-shooters from

various parts of the world, when the prizes are open to public competition.

Such contests afford the fairest opportunities for the display of that calm but quick and ready judgment and precision, without which perfection in the handling and use of the gun can never be attained. They bring out in the clearest light the exquisite skill of a dead shot, and the faults and failings of an unskilful one.

None but masters of the art of shooting could perform, under the trying ordeal of the public gaze, the extraordinary feats of skill and precision which from time to time have been displayed at many of the public pigeon shooting matches. Particularly such feats as those in which the shooter kills a hundred or more birds on wing in quick succession without a single miss.

An imperative rule at all pigeon shooting matches is that in which the shooter is required to hold his gun with the butt-end below his shoulder until the bird is on the wing.

Those intending to enter the arena of public contests, should accustom themselves to the club rule as to this, and the habit of holding the gun properly will be readily acquired. The difficulty will be, if having been accustomed to hold the gun to the shoulder the moment before the bird rises, how to break off the bad habit: unless the loss of matches and stakes by having dead birds challenged and decided

against you for breach of the rules in holding the gun too high, should prove a sufficient disappointment and annoyance to break you of the bad habit. When once the proper manner of holding the gun is acquired it will be easy to adhere to it.

The old rule was that the gun should be held below the elbow; and so long as the elbow was kept straight down close to the side, no better rule could have been adopted. It was, however, sometimes evaded by the elbow being raised nearly to the level of the shoulder. Consequently the modern rules of most of the gun clubs require simply that the gun be held below the shoulder.

According to the rules of the Hurlingham Club, the gun must not be held to the shoulder until the shooter has called "pull." The butt must be clear below the arm-pit, otherwise the referee will declare "no bird."

The rule of the London Gun Club as to this is, that the gun must not be "carried to the shoulder" until the shooter has called "pull."

Guns of rather larger calibre and weight than those ordinarily used for the purpose of shooting game were formerly permitted at most pigeon matches, and even at the present day such guns are sometimes allowed, though not at any of the leading clubs. The most usual gauge is No. 12, and though No. 10 is permitted at some matches, it is now the exception rather than the rule.

At Hurlingham the standard gauge is No. 12, and no guns of a larger gauge than No. 11 are allowed at any time. And the weight of the gun (according to the Hurlingham rules) must not exceed 7 lbs. 8 ozs.

At the Gun Club the weight of the gun is limited to 8 lbs., and the gauge to No. 11.

With regard to ammunition, there was formerly no restriction as to powder; but the charge of shot was limited to $1\frac{1}{2}$ oz.; the number or size being left to the choice or discretion of the shooter.

At the present day the Hurlingham rule as to ammunition is, that the charge of powder is limited to 4 drs., and the charge of shot $1\frac{1}{4}$ oz.: the size being restricted to Nos. 5, 6, 7, and 8. And the rule of the Gun Club as to ammunition is the same.

In the days of muzzle-loaders, all competitors were required to use the same size and measure of shot. It was therefore an almost universal rule that all should load from the same bowl: and this old rule still prevails as to competitors who use muzzle-loading guns.

It was also usual to stipulate that the shooter be allowed to use a larger charge of shot than the maximum quantity, on having the distance at which he shoots increased at the rate of one yard for every one-eighth of an ounce of extra shot. It may well be doubted, however, whether the notion as to an increased charge of shot is not erroneous in prin-

ciple : it being abundantly clear that a small or fair charge of shot, if driven with a liberal charge of powder, is more effective than a large one whatever the range.

Traps for Pigeon Shooting.—There are several kinds of traps for pigeon shooting : as ground traps, spring traps, plunge traps, and lever traps ; some of which are patented.

The best and most durable ground traps are made of iron ; which on being pulled, rattle most and frighten the bird up. The ordinary iron pigeon trap is usually about 12 in. square (or 12 in. by 10). To the bottom, or floor of the trap on the outside, are attached two half tubes, placed longitudinally, so as to raise it 2 or 3 inches from the ground. There are also one or two small holes in the floor of the trap, through which iron pins are driven, in order to hold the trap firmly to the ground. The four sides and top of the trap are all joined by easy-working hinges ; and the top is also joined to the hindmost side by hinges and spring. The front side has one or more air-holes to admit light and induce the bird to stand with its tail towards the shooter. On the top or crown of the trap is a circular hole, about 4 inches diameter, which closes with a lid and clasp. This hole is merely for the purpose of putting the bird in, after the trap is fairly fixed and ready. The cord or wire by which the trap is pulled open is astened to an iron loop on the top of the trap, so

that when pulled the top and all four sides fall outwards, flat upon the ground, and the bird is thereby instantly set free.

An improvement upon the ordinary trap is that in which the front side of the trap is the first part that is pulled open, instead of the top. Traps of this kind are a check upon those who shoot the moment the trap is pulled, and before the bird is upon the wing. The improved trap on being pulled, first opens the front side, to the level only of the top of the trap: and as the joint will not admit of the front side falling back upon the top, the latter as well as the right, left, front, and back sides, then all fall backwards towards the shooter, so that during the process of pulling the bird is protected by the broad sides of the trap. It is therefore a complete check upon those who fire either at the trap or just over it whilst it is being pulled; and before the bird is fairly upon wing.

Some of the spring, plunge, and lever traps are of ingenious contrivance. They are provided with spring, plunger, or lever (as the case may be) for plunging or sweeping the bird out of the trap, or for tossing it up in the air, and so ensuring its immediate flight.

Some of these traps are constructed so as to stand a foot or more above the ground: and some are contrived to start the bird to right or left, or in any direction that may be required.

H and T Traps.—Formerly at most of the shooting matches both in town and country, H and T traps were constantly used. But since the introduction of a pulling apparatus, which dispenses with the necessity of tossing or drawing for numbers, H and T traps have gone quite out of use at the shooting clubs. At country shooting matches, however, and in places where they are not provided with a pulling machine, the H and T traps are still used.

The term “H and T” refers merely to the *tossing* (head or tail), to decide from which of two traps the bird is to be released. Accordingly the traps are either marked with those letters, or so indicated by their position, one being placed to the right of the shooter, and the other to the left. In a shooting match between two persons, as soon as a bird is placed in each trap, one competitor comes forward to shoot; the referee then tosses up a coin; if it comes down head uppermost, the shooter takes the H trap, or rather the bird he has to shoot at is released from that trap, and his opponent the other. If the coin comes down tail uppermost the effect is *vice versá*, and so on throughout the match.

The system is a very old, but nevertheless a very fair one, whether the traps be ground traps, spring, plunge, or lever traps. It is also a check upon the trapper, who may have put a strong bird in one trap and a weak one in the other.

Where there are several competitors, as in country

matches and sweepstakes, the H and T traps are frequently resorted to, but the names of the competitors are put upon a list and numbered: tickets with corresponding numbers are then put into a hat or ballot-box No 1: and after being shaken up, are drawn out one at a time by the referee. The shooter whose number on the list corresponds with the ticket drawn, then comes forward, and takes his shot at the bird from the H or the T trap, as the referee decides by the toss of a coin, as before stated. The drawn ticket is then placed in the hat or ballot-box No. 2, and another ticket is drawn from ballot-box No. 1, and so on until all the competitors have taken their turn: when all the tickets will then be in ballot-box No. 2. The same process is then repeated by drawing the tickets from No. 2 and replacing them in No. 1, as the shooters take their turn: and so on to the end of the match.

For double-bird shooting, four H and T traps are used, placed alternately, two yards apart. For single-bird shooting, when two traps only are used, they are placed four yards apart.

Arrangement of the Traps: and other proceedings at Pigeon Matches.—In the matches of the Hurlingham and other gun clubs, it is usual to have five traps ranged upon the ground in arc-like form, each five yards apart. The object of five traps is to deceive the shooter, or rather to prevent his knowing the precise spot from which the bird will rise: and with

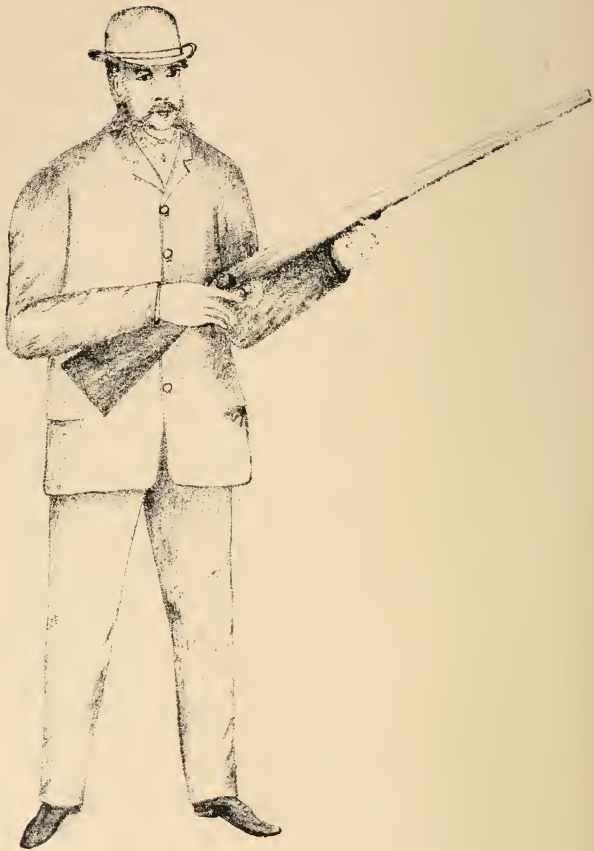
that view, a bird is placed in each trap, before the competitor comes forward to shoot.

In line with the right-hand side of the central trap, is the foot-rail, or indicator, on which is marked the various measured ranges, in feet and yards, from eighteen to thirty-five yards. The foot-rail is fixed along the ground on the right-hand side of the shooter; and stands a few inches above ground. When the shooter stands close to it on the left-hand side at whatever range, he is precisely in line with the central trap; and he is, or should be, also equidistant from all five. Along the upper edge of the foot-rail are notches or sockets; one at every half yard, for receiving a short wooden cross piece or metal slip, indicating in legible figures the measured range or distance from the traps. Each competitor, as his turn comes round, takes up his position at the foot-rail at the distance indicated, from which he is required to shoot.

The object in placing the traps so that they form a segment of a circle, is, that each trap may be equidistant from the shooter as he stands at the foot-rail.

Behind the foot-rail is the puller's box, or station; and behind, or over that, the rostrum for the scorer and referee.

To many men, it is much easier to kill a bird from the traps on the left-hand side, than from those on the right: and so the bird from the trap on the extreme right usually presents the most difficult



.READY ! PULL !

shot of all five, particularly if it also goes off to the right.

In order, therefore, to ensure the most perfect fairness, various expedients were formerly resorted to, such as the use of H and T traps (as already explained): also that of small dies, or counters, marked respectively, 1, 2, 3, 4, and 5, which were shaken up in a lottery wheel, or drawn from a ballot-box, immediately on the shooter taking his place at the foot-rail, when the number drawn indicated the trap to be pulled.

At the present day, however, a mechanical apparatus, termed a Pulling Machine (of which there are several different forms), is used at all the principal shooting clubs, both in England and on the Continent, which entirely dispenses with tossing and number-drawing. The machine itself is provided with a revolving apparatus, which puts it beyond the control of the puller, or any one else, so far as the choice of the trap is concerned.

On the shooter giving the signal "ready! pull!" the machine is set in motion; and, accordingly it revolves, and then stops by chance at one of the five wires, which it instantly acts upon so as to pull the trap and release the bird. The apparatus consists mainly of a drum and ratchet wheel, with mechanical appliances for manipulating the wires and throwing the traps open. It may be set so as to pull either one or two traps at the same time. The machine

is enclosed in a neat mahogany case, about eighteen inches or two feet in width, by three feet in height: and no indication is given as to which trap will be acted upon, until the trap itself is seen to fly open and the top and sides fall flat upon the grass.

The outside wires which connect the traps with the machine are usually partly enclosed in galvanised iron tubes, laid along the grass from just outside the machine itself, to the extreme end of the foot-rail, or a little beyond it.

There are several forms of pulling machines, but the one above described, which is upon Fuller's principle, is the most approved; and is similar to that now in use at the Hurlingham.

The machine known as Beer's patent is also used at some shooting clubs: it is of vertical construction, standing about two feet six inches high, and is set in motion by means of a hand lever.

The machine used at the Gun Club, Notting Hill, is worked by means of a spherical ball or bullet, which is rolled down a spiral groove, and when it reaches the bottom it drops into one of five sockets, whereby it sets a spring in motion which acts upon a lever, and the wire of the trap indicated is then pulled and the bird released from the trap. But the objection to the latter form of machine is, that any deviation from the true level at the base of the apparatus would cause it to deposit the ball in one particular direction.

The term "fair bird" in pigeon shooting, implies a bird which takes wing on being released from the trap, and so gives the shooter a fair chance of killing it on wing, within the boundary.

"Dead bird" implies a bird fairly risen, shot, and gathered within the boundary.

"Lost bird" is that which is shot at and missed: also any bird which, after being wounded, falls outside the boundary.

"No bird" when through some mistake, accident, or other cause the bird was not risen according to the rules; or if it gave the shooter no chance of killing it on wing within the boundary; in which case he is entitled to another bird.

Ties occur when two or more of the competitors kill an equal number of birds; which is frequently the case when the shooters are numerous; in which event, those who tie, shoot again; each, bird for bird, until one or other of the tiers misses his bird; whereupon he withdraws: then the remaining tiers continue shooting bird for bird until all but one of the competitors have missed; the latter being then declared the winner.

In shooting off the ties, very much sometimes depends on the birds; one perverse bird may cause the best shot to miss, and lose his prize.

General Observations on Pigeon Shooting.—Pigeon shooting requires considerable practice: and there is no sport in which success depends so much on the

perfect coolness and prompt dexterity of the shooter. In no branch of our sport are the nerves more severely tried, nor more likely to be discomposed than in a public shooting match, where hundreds of eyes are upon each performer.

Occasionally one meets a sportsman who, although a dead shot in the field, is easily beaten at a pigeon match by a mere second-rate shot. With but few exceptions, however, a good shot in the field is generally a good pigeon shooter: but it is not so generally the case that a good pigeon-shot is equally skilful in the field; though in the majority of cases, really good pigeon match shooters are dead shots in the field at game of all kinds.

Pigeon shooting at public matches differs in some important particulars from that of game shooting in the field. In the first place, there is the certainty of knowing that the pigeon will rise from the trap within range, and that if a good blue rock, it will fly off with great power and rapidity the moment it fairly feels its wings; therefore unless brought down promptly, within a few yards of the trap, the odds are in favour of its escaping beyond the boundary; in which case a "lost bird" is marked to the shooter instead of a dead one. But in game shooting in the field there is uncertainty as to the particular spot at which the bird will be found, and surprise as well as uncertainty as to the moment at which it will rise; and there are no "hundreds

of eyes" to discompose the nerves of the sportsman. Besides too, grouse, partridges, and pheasants are all birds of different flight to pigeons; and being much larger, they present easier marks to the shooter.

A blue rock pigeon (particularly if an old one) is a bird of powerful flight, with small body, but large wings, and thick plumage offering considerable resistance to shot; which must therefore be driven with great force.

Although pigeons are sometimes brought down at long range, there is no certainty of killing a strong blue rock at a range of more than 40 yards; owing to the small size of the body of the bird, apart from its feathers; also the spread of the shot and the diverging lines in which the pellets travel beyond that distance.

The best blue rocks are bred in Lincolnshire, and are known as the Tin Blue rock. They are the most difficult of all to kill, being of the wildest nature, quickest in flight when released from the trap; and having small bodies, thickly and closely coated with feathers, they require hard-hitting, and must be taken very quickly, or they will assuredly escape; particularly in the winter months, and early in the spring, when they are wilder and quicker than in the summer months. Blue rocks are also bred in large numbers in Oxfordshire, Yorkshire, and some other counties, but they are

inferior, as birds for the trap, to the Lincolnshire Tin Blue rocks.

Blue rocks are also largely imported from Antwerp, and are bred extensively in various parts of Belgium.

It is of the utmost importance, that all the proceedings at a pigeon match be conducted fairly, honourably, and impartially.

There being sometimes a number of old birds as well as young ones, they should be assorted; the old ones being put into one basket, and the young ones in another; they can then be fairly apportioned between the shooters. But if the old and young are all together in one basket, an element of advantage on the one side, and unfairness on the other, is introduced; whereby one of the competitors has at least a chance of a majority of young birds, whilst his opponent may have a majority of old ones.

Young birds, as a rule, are slower and easier to kill within bounds than old ones, which are generally fast "driving" birds, requiring very hard hitting. Therefore, unless the birds are fairly apportioned, the match will not be a true test of skill. Besides, too, when blue rocks are difficult to obtain, there is sometimes a strange mixture; some of the birds being very small, and others large and heavy, "regular owls" as they are termed.

The boundary rules, or those which prohibit the

scoring of a bird unless it falls within a certain boundary, should be liberally construed; particularly if the rise be over twenty-one yards, or the match at two birds at a time.

It is well known by those who are in the habit of attending pigeon matches, that some of the most difficult and brilliant shots are made at the fastest and hardest of old birds; which, though mortally hit, carry the shot away with them a short distance, and then drop dead just outside the boundary; when of course, by the rules of the club, such a bird does not score; though probably a better shot has not been made throughout the whole contest.

Instances are of frequent occurrence in which the best shot in the match is adjudged beaten because one or two of his birds, though mortally struck, have fallen just outside the boundary limit. Indeed it sometimes happens that in matches of 50 or 100 or more birds to each competitor, although one kills every bird without a single miss, yet as some four or five or more fell out of bounds, the prize goes to another; who, though he missed several of his birds, still a sufficient number fell within bounds to give him a majority.

As a remedy for this, it is suggested that the boundary line should be extended wherever it can, or else that any bird be scored if gathered within a certain time.

The young pigeon-shot will do well to consider

attentively the lessons on the art of shooting which have been given in the early part of these pages ; and which apply with equal force to shooting pigeons as to shooting game ; bearing in mind that it is necessary to aim more or less in advance of a fast bird, going to right or left according to the angle of its course ; and over its back on going straight away.

Some pigeon-shooters acquire a habit of killing their birds directly they are out of the trap : and some of these men often kill nineteen birds out of twenty, with splendid precision, at twenty-five yards' rise. The knack of killing them in this manner consists in holding the gun in direct line with the trap, and taking the birds the instant they rise ; being cautious not to fire too low, remembering that they are rising, not flying forward.

Some of the most remarkable and brilliant performances are those in which the competitors are matched to shoot at pigeons released two at a time, sometimes from the same trap, but generally from separate traps, placed several yards apart. Extraordinary skill and precision are displayed at some of these matches. A still more difficult and brilliant performance is that in which the competitors stand midway between two spring, or plunge, traps, forty yards or more apart ; both traps being pulled at the same time, whereby a bird is released from each at the same instant ; the shooter having

to turn himself about to look for, and then shoot the second bird; so that unless he is very quick with the first, the second will be out of range before he can bring his gun to bear upon it, so powerful and rapid is the flight of the blue rock pigeon. Public contests of this description have recently been held, in which one of the competitors brought down, within the boundary of eighty yards, eighty-five birds out of fifty pairs. Such performances are, truly, an indisputable test of skill of the highest order. No one but a "dead shot" in the truest sense of the word, could, under such circumstances, kill pigeons right and left in such quick succession.

Through the courtesy of the secretary to the Hurlingham, I am enabled to append a copy of the revised rules in shooting of that distinguished club: which are as follows:—

THE RULES IN SHOOTING OF THE HURLINGHAM CLUB.

- 1.—The Referee's decision shall be final.
- 2.—The gun must not be held to the shoulder until the shooter has called "Pull." The butt must be clear below the arm-pit, otherwise the Referee shall declare no bird.
- 3.—A miss-fire is no shot, provided the shooter has a cap or tube on the gun, and it be cocked and

loaded, or, in the case of a breech-loader, if the cartridge does not explode.

4.—If the shooter's gun miss-fire with the first barrel and he use the second and miss, the bird is to be scored lost.

5.—If the miss-fire occurs with the second barrel, the shooter having failed to kill with his first, he may claim another bird ; but he must fire off the first barrel with a cap on, and a full charge of powder, or in case of a breech-loader, with a blank cartridge, before firing the second. And he must not pull both triggers at the same time.

6.—The shooter in a match or sweepstakes shall be at his shooting mark at the expiration of two minutes from the last shot, unless in the case of an accident, when the Referee shall decide what time shall be allowed to remedy the accident.

7.—The shooter's feet shall be behind the shooting mark until after his gun is discharged. If, in the opinion of the Referee, the shooter is baulked by any antagonist or looker-on, or by the trapper, whether by accident or otherwise, he may be allowed another bird.

8.—The shooter, when he is at his mark ready to shoot, shall give the caution " Are you ready ? " to the puller, and then call " Pull. " Should the trap be pulled without the word being given, the shooter may take the bird or not ; but if he fires, the bird must be deemed to be taken.

9.—If, on the trap being pulled, the bird does not rise, it is at the option of the shooter to take it or not; if not, he must declare it by saying “No bird;” but should he fire after declaring, it is not to be scored for or against him.

10.—Each bird must be recovered within the boundary, if required by any party interested, or it must be scored lost.

11.—If a bird that has been shot at perches or settles on the top of the fence, or on any part of the buildings higher than the fence, it is to be scored a lost bird.

12.—If a bird once out of the ground should return and fall dead within the boundary, it must be scored a lost bird.

13.—If the shooter advances to the mark and orders the trap to be pulled, and does not shoot at the bird, or his gun is not properly loaded, or does not go off, owing to his own negligence, that bird is to be scored lost.

14.—Should a bird that has been shot at be flying away, and a bystander fires and brings the bird down within the boundary, the Referee may, if satisfied the bird would not have fallen by the gun of the shooter, order it to be scored a lost bird; or if satisfied that the bird would have fallen, may order it to be scored a dead bird; or if in doubt on the subject, he may order the shooter to shoot at another bird.

15.—A bird shot on the ground with the first barrel is “No bird,” but it may be shot on the ground with the second barrel, if it has been fired at with the first barrel while on the wing; but if the shooter misses with the first and discharges his second barrel, it is to be accounted a lost bird, in case of not falling within bounds.

16.—Only one person to be allowed to pick up the bird (or a dog, if the shooter will allow it). No instrument is to be used for this purpose. All birds must be gathered by the dog or trapper, and no member shall have the right to gather his own bird, or to touch it with his hand or gun.

17.—In Single Shooting, if more than one bird is liberated, the shooter may call “No bird,” and claim another shot; but if he shoots, he must abide by the consequences.

18.—The shooter must not leave the shooting mark under any pretence to follow up any bird that will not rise, nor may he return to his mark after he has once quitted it to fire his second barrel.

19.—In matches or in sweepstakes, when shot is limited, any shooter found to have in his gun more shot than is allowed, is to be at once disqualified.

20.—Any shooter is compelled to unload his gun on being challenged; but if the charge is found not to exceed the allowance, the challenger shall pay forthwith £1 to the shooter.

21.—None but members can shoot except on the occasion of private matches.

22.—No wire cartridges or concentrators allowed, or other substance to be mixed with the shot.

23.—In all handicaps, sweepstakes, or matches, the standard bore of the gun is No. 12. Members shooting with less to go in at the rate of half-a-yard for every bore less than 12 down to 16-bore. Eleven-bore guns to stand back half-a-yard from the handicap distance, and no guns over 11-bore allowed.

24.—The winner of a sweepstakes of the value of ten sovereigns, including his own stake, goes back two yards; under that sum, one yard, provided there be over five shooters. Members saving or dividing in an advertised event will be handicapped accordingly.

25.—Should any member shoot at a distance nearer than that at which he is handicapped, it shall be scored no bird.

26.—That for the future the charge of powder is limited to four drachms. Chilled shot and "sawdust" powder may be used. The weight of guns not to exceed 7 lb. 8 oz. Size of shot restricted to Nos. 5, 6, 7, and 8. Charge of shot limited to $1\frac{1}{4}$ oz.

27.—All muzzle-loaders shall be loaded with shot from the Club bowls.

28.—If any bird escape through any opening in

the paling, it shall be a "No bird," if in the Referee's opinion it could not have flown over the palings, but in no instance shall it be scored a dead bird.

29.—From the 1st of May the advertised events shall begin at three o'clock, unless otherwise notified, and no shooter will be admitted after the end of the second round in any advertised event.

30.—No scouting allowed on the Club premises, and no pigeon to be shot at in the shooting ground except by the shooter standing at his mark. Anyone infringing this rule will be fined £1.

Rules for double rises. 1.—In Double Shooting, when more than two traps are pulled, the shooter may call "No birds," and claim two more; but if he shoots, he must abide by the consequences.

2.—If, on the traps being pulled, the birds do not rise, it is at the option of the shooter to take them or not. If not, he must declare by saying "No birds."

3.—If, on the traps being pulled, one bird does not rise, he cannot demand another double rise; but he must wait and take the bird when it flies.

4.—A bird shot on the ground, if the other bird is missed, is a lost bird; but if the other bird is killed, the shooter may demand another two birds.

5.—If the shooter's gun misses fire with the first barrel, he may demand another two birds; but if he

fires his second barrel, he must abide by the consequences. If the miss-fire occurs with the second barrel, the shooter having killed with the first, he may demand another bird, but may only use one barrel ; if he missed with his first barrel, Rule 5 in Single Shooting will apply.

A bird falling dead on the Scoring Box is to be counted for the shooter.

The above form the complete Rules in the Pigeon shooting matches of the Hurlingham Club.

GENERAL RULES FOR CONDUCTING PIGEON MATCHES IN THE COUNTRY.

Preliminary arrangements.—Before subscribers' names are entered and stakes received, the following preliminaries should be arranged, viz., the number of birds to be allowed to each person ; the number of traps to be employed ; the distance at which the birds are to be risen ; the boundary within which they must fall ; the maximum size, or gauge, of guns to be used, and the charges of powder and shot.

Appointment of officers.—Before the match commences, scorer, trapper, puller, and referee should be chosen ; also one or more gatherers ; and if a gatherer is to be allowed the assistance of a dog, it should be so stipulated.

Size and weight of gun.—The standard gauge shall be No. 12. No gun shall be used of a larger gauge than No. 10; nor exceeding the weight of eight pounds. Competitors using a smaller gun than No. 12 to be allowed an advance of half a yard at the foot rail for each smaller gauge up to No. 16. Those using guns of No. 11 bore, to go back half a yard; those using No. 10, to go back one yard.

Powder and shot.—The maximum charges of powder to be four drachms; of shot $1\frac{1}{4}$ oz. The size of shot is restricted to Nos. 5, 6, 7, and 8.

Unfair loading.—Any competitor may challenge another as to any suspected unfairness in the charge of powder or shot, and the person challenged must draw his charge and submit it for examination, in presence of the referee, when, if it is found to exceed the maximum allowance, the person challenged is to pay a fine of £1 to the sweepstakes or prize fund, and be disqualified for shooting in the match or sharing in the result. But if the charge of shot be found not to exceed the fair maximum allowance, then the challenger to pay a forfeit of £1 to the party challenged.

As to the use of one or both barrels.—The use of one barrel only [or both as the case may be] to be allowed to each bird. If the match is for double shots, *i.e.*, at two birds to be risen at the same time, if the shooter miss with his first barrel, he

is at liberty to shoot with his second barrel at the same bird.

Position of shooter at the foot-mark.—After the shooter has taken his stand at the foot-mark, he is not to level his gun, nor to raise the butt-end above his elbow, until the bird is on the wing. On any competitor infringing this rule, the bird will be scored against him as a “lost bird,” whether he kills it or not.

The signal and release of birds.—The shooter, when at the foot-mark to give the signal “ready,” “pull!” and the puller to receive and obey such as the signal to pull the trap fairly over, and release the bird *instantly*.

If the trap be pulled, or the bird released before, or not at the time of the signal, the shooter to have the option of calling “no bird!” and refusing to shoot: but if he shoots, the bird will be deemed a “fair one,” and scored for or against him, as the result may be.

Accidental release of birds.—In single-bird matches, if two or more birds be released at the same time (whether accidentally or otherwise), the shooter to have the option of calling “no bird!” and refusing to shoot at either; but if he shoots, the bird will be scored for or against him, as the result may be.

And in double-bird matches, if more than two birds be liberated at the same time, the shooter may kill as many as he can; and all he kills within the

boundary shall be scored in his favour ; or he may refuse to fire at either, and claim two more ; but if he shoots at one or more, it will be scored as a "fair double shot" for or against him, as the case may be.

Birds not immediately rising.—If the bird does not rise immediately after the trap is pulled, the shooter to have the option of calling "no bird!" but if he shoots, on its afterwards rising, it will be considered a "fair bird."

Shooting at birds before they rise.—If the competitor shoots at the bird on the trap, or on the ground, before it rises, it will be scored against him as a "lost bird;" and this whether he kills it or not.

All birds to be shot on wing: (exception).—A bird must be shot whilst on the wing, in order to score as a "fair bird" (*with this exception only*)—that when both barrels are allowed to each bird, and the shooter having wounded a bird with his first barrel, the second may be fired at the bird on the ground, if the shooter fears it may rise again or escape beyond the boundary before it can be gathered.

Miss-fires.—In case of a miss-fire, through the cartridge or charge not exploding, or other accidental circumstance not attributable to the shooter's negligence, he may call "no bird!" and claim another.

Referee's decision final.—Whether a "fair bird," "dead bird," "lost bird," or "no bird," must be

decided in every case, during the match, by the referee. And in all cases of dispute, the decision of the referee shall be final.

Gathering Birds.—Every bird must be gathered within the boundary, in order to score as a “dead bird.” If a bird, after being fairly shot at, strikes against the fence, and then falls within the boundary and is gathered, it will be scored in favour of the shooter as a “dead bird.”

Birds wounded alighting on tree or boundary fence.—Any bird, which, after being shot at, perches or settles on the top of the boundary fence, is to be deemed a “lost bird;” and if, after perching or settling on or outside the boundary fence, it falls or returns back within the boundary, it is nevertheless to be considered a “lost bird.” So also if it perches or settles on a tree or building within the boundary, whether it afterwards falls or not, it is a “lost bird;” because the probability is, that but for the tree or building, the bird would have had strength left to have flown out of bounds.

Wounded bird shot by a scout.—If a bird be shot at and hit so hard by the shooter, that in the opinion of the referee it would have fallen within bounds, but before falling was shot by a scout or some other person, it will be deemed “no bird,” and the shooter may claim another. But if in the opinion of the referee the bird was missed, or only slightly wounded by the shooter, and afterwards killed by the scout

within bounds, it is in that case to be scored against the shooter as a "lost bird."

H and T traps.—When H and T traps are employed, a bird shall always be put in each trap before the toss.

Interrupting competitors.—Any competitor wilfully interrupting another whilst at the foot-mark, to pay a fine of £1 to the stakes or prize fund, and be disqualified for shooting and sharing in the results of the match; and the shooter so interrupted to have the option of calling "no bird!" and claiming another, whether he shoots during the interruption or not.

Ties.—All ties to be shot off on the same ground, immediately after the match, if they can be concluded before sunset; but any competitor may refuse to shoot after sunset; and in case of such refusal, the tie-shooting to be completed on the next day, or on some other day to be appointed by the referee.

The tiers in a sweepstakes or prize-shooting match may agree to share or divide the stakes or prize; but if any one of the tiers refuses to share or divide it must be shot off.

Any one of the tiers being absent, or not coming to the foot-mark to shoot off his tie, within ten minutes after his name is called, on the same or an appointed day, to forfeit all claim to the sweepstakes or prize.

GLASS-BALL SHOOTING FROM GLASS-BALL TRAPS.

The glass-ball trap is an American invention, consisting of a solid wooden base with powerful steel spring, cup, &c., whereby a glass-ball may be jerked from the trap to a distance of 25 or 35 yards, not straight up in the air in a perpendicular line unless desired, but away from the shooter as a bird flies, a few yards above the ground; and in any direction that may be required. That part of the trap which contains the spring, moves upon a pivot, and may be placed in such a position as to throw the ball in the direction of a cross-shot, at any angle to right or left, as may be required.

Glass-ball shooting from such traps undoubtedly affords excellent practice for young sportsmen.

The patent glass-ball trap and balls invented by Captain Adam H. Bogardus, the champion wing-shot of America, appears to be one of the most approved of the kind. The surface of his patent glass-balls are roughed or corrugated, so as to prevent the glancing of shot when striking it, and ensuring the shattering of the ball. Glass-balls may also be had filled with feathers.

There are several inventions of glass-ball traps by English manufacturers: among which are rotating traps which throw balls with great force and in any required direction. But there are some which

merely toss the ball a few yards perpendicularly in the air: such, however, afford but poor practice, as anyone can soon acquire the knack of hitting every ball from such a trap.

For glass-ball shooting use No. 8 shot and a liberal charge of powder.

The great objection to glass-ball practice in the country, is the injury it does to the grass, in the scattered fragments of broken glass being strewn about; rendering it dangerous to turn cattle, sheep, or horses in the meadow to feed. It is well known that cows have died from swallowing small broken fragments of decayed wire, which had fallen from wire fences among the grass, and stuck in their throats when grazing; and there is undoubtedly equal danger from the scattered fragments of shattered glass from glass-ball shooting.

But wherever the practice can be had over a paved yard or other metalled enclosure, in which the broken fragments may be swept up and removed, there can be no such danger or objection.

It is suggested that balls of some other material than glass might be invented, which would answer the same or a similar purpose.

BOGARDUS'S RULES FOR GLASS-BALL SHOOTING.

RULE I.—All matches or sweepstakes shall be shot from three traps placed ten yards apart, eighteen yards rise, and the choice of trap to be decided by the referee, by drawing a gun-wad from his pocket and showing to trap-puller.

RULE II.—*Pulling of traps.*—The trap-puller shall stand six feet behind the shooter. The traps shall be numbered 1, 2, and 3. The referee shall have three gun-wads; upon each a number corresponding to the trap. When the shooter is at the score to shoot, the referee will then draw a wad from his pocket and show it to trap-puller; the trap-puller will then say, "Ready!" after which the shooter calls, "Pull!" In all cases the puller must pull fair for each shooter. If the trap is sprung before the shooter has given the word, he can take the shot or not; but if he shoots the ball or balls shall be scored, whether broken or not, as the case may be.

RULE III.—*Referee.*—In all cases a referee shall be appointed, and his decision shall be final. In case the trap, when sprung, breaks the ball, the referee, in all cases, shall require the party to shoot at another ball, whether he shoots or not.

RULE IV.—*Position at the score.*—After a shooter has taken his place at the score, he shall not level

his gun or raise the butt above the elbow until he calls "Pull." Should he infringe on this rule, the ball or balls shall be scored as lost whether broken or not.

RULE V.—All balls must be broken in the air to count, if shot on the ground shall be scored as lost.

RULE VI.—There shall be no restriction as to size of shot used, or charge of powder, but the charge of shot shall not exceed $1\frac{1}{4}$ oz., Dixon measure. Any one using a larger quantity of shot shall forfeit all rights in the matches. After a gun is loaded and challenged, and the shooter discharges his gun, the penalty will be the same as for overloading.

RULE VII.—All ties to be shot off at 21 yards rise, at five single balls each, and, in case of a second tie, five more balls, and so on until decided. In all cases ties must be shot off before sunset or postponed until next day, unless the interested parties agree otherwise.

RULE VIII.—In double shooting the distance shall be 16 yards rise, and from two traps placed ten yards apart; ties shot off at 18 yards rise, at three pairs of balls each; and in case of second ties, three more pairs each, and so on until decided. In all cases both traps must be sprung at the same time.

RULE IX.—*Time at the score.*—A participant in a match shall hold himself in readiness to come to the

score when his name is called by the scorer. If he is longer than five minutes, it shall be discretionary with the referee whether he shall allow him to proceed further in the match or not.

RULE X.—*Miss-fire*.—Should a gun miss fire or fail to discharge, from any cause, it shall score as a lost ball, unless the referee finds, upon examination, that the gun was properly loaded and the miss-fire unavoidable, in which case he shall allow another ball.

RULE XI.—*Loading guns*.—In case of breech-loaders, the party called to the score shall not place his cartridge in the gun until he arrives at the score. In case of muzzle-loaders, the party called to the score shall not place the cap on his gun until he arrives at the score.

RULE XII.—The same rules govern single-trap shooting, only the trap to be changed at every shot.

No one but a contestant has a right to challenge.

DOG-BREAKING.

No good sport is to be had, or, at least thoroughly enjoyed, without a good dog.

The best sport with the gun, and the highest enjoyment of it, is with the best dogs.

Bad sport may often be made good with the assistance of well-bred and well-broken dogs.

It is as easy for a sportsman to select a good dog as it is for a fox-hunter to select a good horse ; and the good qualities are as essential and valuable in the one as in the other.

A well-bred, well-broke, and clever dog costs no more, either for food or for dog-tax, than an ill-bred or ill-broken mongrel.

A good dog in the hands of an unskilful shot is soon spoilt, and therefore a dog never long remains a good dog in such hands.

A good shot will never buy a dog of a man he knows to be a bad shot, nor will he a dog that has been in the use of such a man.

Good shooting makes good dogs ; but bad shooting spoils good dogs.

One of the worst faults in a dog is that of

running in the moment the gun is fired, and chasing the covey across the field, and so putting up other birds and spoiling the shooting. There is no worse fault in a dog, and it is one that can never be cured. A dog with such a fault is worse than useless for partridge-shooting.

Another very bad fault in a dog is that of hare-chasing, and of which also a dog cannot be broken. A bad shot will rate his dog severely for chasing a hare at which he has fired and missed; and yet he will encourage the same dog to chase a wounded hare.

Dog-breaking, to be entirely successful, must be conducted on rational principles. Much experience is not necessary; but common sense and an acquaintance with the nature and disposition of dogs are indispensable.

Neither is it by any means necessary that the dog-breaker should be a good shot.

But it is indispensable that he should be good-natured, patient, and free from irascibility.

In dog-breaking, the first, last, and ever-present auxiliary to call in aid is common sense.

Any system of dog-breaking that is antagonistic to common sense must fail.

The dog is, by nature, endowed with remarkable faculties, wonderful sagacity, faithfulness, and obedience. He is, therefore, an apt and ready learner, if only the teaching be right.

Everything that is required of a sportsman's dog in the field may be taught the dumb animal, if the teaching be done with kindness and patience.

The dog-breaker who uses most kindness, and is most sparing and mild in the nature of his chastisement towards the dog, always succeeds best. The violent, severe, and impatient bully never succeeds in turning out a perfectly-trained dog. The utmost he attains is to make the dog stand in terror of him ; so that, for fear of having some of its bones broken, or being beaten to death, it runs away on the least intimation of having done wrong, and probably puts up covey after covey as it races across the field. It is a true test, on a dog running away in this manner, that it has been badly trained and cruelly beaten. No dog which has been properly trained and mildly and judiciously chastised would do so.

It is wanton cruelty and ignorant folly to chastise a dog at any time, unless the dog itself knows *why* it is punished. It is the well-timed chastisement, not the severity of it, that ensures obedience.

Many faults may be reprovèd without punishment.

Excessive flogging makes the dog hunt in fear, and with a broken spirit ; whereas the bold and dauntless-spirited dog is the sportsman's pride and delight ; and the courageous dog is, of all others, the one to hunt with most success and least fatigue.

Unless a dog hunts cheerfully and willingly, entering with all its heart into the spirit of the sport, its services are not of much value.

It is true that some dogs require rather more chastisement than others, whilst some may be broken without a lash.

All dogs should be trained as much as possible by dumb signals; and this system of training is specially applicable to the instruction of pointers and setters.

A talkative trainer spoils the dog, though it be ever so well bred, because it becomes so accustomed to the voice of its trainer, that it will obey none other than verbal signals. The more care and trouble the trainer takes in teaching the dog by silent signals, the more valuable and useful will it be when in pursuit of sport.

It is unreasonable to suppose that birds will lie well if they hear your voice. Therefore, once more I repeat, "Don't talk to your dogs when in expectation of finding game."

A single note of a soft whistle is sufficient to call a dog's attention to you in the field; your further instructions may then be signalled to the dog by motion of the hand. A well-bred dog quickly acquires the habit of attending to and obeying such signals, but you must not change or vary them so as to confuse him.

With a dog carefully trained to obey signals

instead of words, the sportsman's chances of getting within range of his birds are very much increased, particularly at a time of year when they have become wild and wary.

A dog, in its very nature, will soon discover from its dumb trainer that, to approach game, silence must be observed. Retrievers which have been accustomed to attend sportsmen who go wild-fowl shooting, are particularly sagacious as to their duty, and that of their master, being such that the strictest silence must be observed; and when stalking wild-fowl, a clever dog will crawl along with belly touching the ground, on a signal to do so by its master, who probably has to do likewise.

Dog-training by dumb signals is the most natural to a dumb animal; consequently, it is the system by which the dog will learn quickest.

All beasts of prey by silent stealth creep upon their victims; so, too, must silence be observed by the sportsman and his dog if they would approach within range of their game, and the best way successfully to carry out that method is to teach a dog all his lessons by silent signals.

POINTERS AND SETTERS.

It is desirable that a sportsman should break or train his dogs himself. Many a valuable dog, whose training has not been completed before passing into other hands, is rejected for apparent deficiencies in its training, when, in truth, the assumed deficiencies arise from the fact that the voice of its new master, being different in tone to that of its trainer, and the signals such as the dog never before heard or saw, the poor brute is unable to comprehend what is required of him; and so, though he tries to go right, he goes wrong.

Severe chastisement is a great mistake. Many a good dog has been spoilt by it: so that on sniffing game, instead of approaching and pointing it, the dog comes to heel for fear of a thrashing.

There is no better age at which to commence the training of a dog than at seven months old; and all the initiatory lessons had best be given in a yard, on the premises where the dog has been brought up. The trainer will find it of immense advantage to devote about twenty minutes, daily, for three or four weeks, to the preliminary lessons, before taking the dog out in the fields in search of game.

The lessons should be given when the trainer is alone with the dog: there must be nothing to divert its attention from the trainer.

Begin by practising the dog, when hungry, to seek about the yard for pieces of food, which you have unobservedly placed in concealment. Accompany the dog in its searches, encouraging it to hunt for the food by the motion of your hand; and induce the dog to fancy you are looking for something. Always show pleasure and satisfaction when the dog finds the food. Do not allow it to eat the food immediately: take it in your hand, look at it, show it to the dog, let him smell it two or three times, and then give it him to eat. Place a piece sometimes on a chair or stool, so as to induce the dog to hold up his head. The higher pointers and setters carry their noses the better, because they find their game quicker; and the birds lie better to such dogs than to those which carry their noses close to the ground. Never deceive the dog by encouraging it to hunt for a bit of food, unless there really is a piece secreted; and never allow the dog to give up until it has found it. This will go far in giving the animal early confidence in you, as possessing a superior knowledge as to whether there is game to be found or not, when out in the fields.

Having taught the puppy to seek for and find the hidden pieces of food, the use of the check-cord must then be resorted to, for the purpose of teaching it to stand firm, and stop instantly to the signal "to-ho!" This important lesson is taught in the

following manner:—Having buckled a soft leathern collar round the puppy's neck, attach thereto a cord about fifteen or twenty yards in length, the end of which hold firmly in your hand: then encourage the dog, as before, to hunt for a piece of food, and just as its nose is being tickled with the savour of the tit-bit, call out "to-ho!" at the same instant pulling the cord sharply, so as to bring the dog to a stand-still; at which you must keep him whilst you walk slowly up to him: after which allow him to advance and eat the bit he has found. In a short time it will be unnecessary to use the cord, and by simply saying "to-ho!" the dog may be instantly brought to a stand-still.

Never *throw* pieces of food to sporting puppies of any kind—always *give it* them with the hand, and make them take it gently.

Teaching a dog to drop to the hand is another of the first and most important lessons in the instruction of pointers and setters. By "dropping to the hand" is meant to "down charge," or crouch to the signal of holding up the hand high above the head. This may be taught thoroughly in the yard, before ever taking the dog out in the fields. The most simple manner of teaching it is by holding up a whip, and calling out "down charge!" Then insist on the dog lying still whilst you walk away to another part of the yard. If he attempts to move, tie him to a stake, repeating your

orders to "down charge!" After a very few lessons, the stake and whip may be dispensed with; and the dog, by further practice, will crouch to the signal of holding up the hand, and remain so until encouraged to "hold up!" The use of the gun, first with gun-caps only and afterwards with a very small charge of powder, will be of advantage in this lesson, taking the greatest care not to frighten the dog with a loud report, or by using the gun offensively.

Teach the dog also to obey your whistle—a single note meaning "attention," and a continued whistle that he is to come to you. The single note should be given when the dog's attention is occupied in hunting for the secreted bits of food; and on the instant of the dog looking towards you in obedience to the whistle, direct him further by some dumb signal, either to hunt to the right or left, or to "down charge!"

Never use sentences in speaking to a dog; one word only is best; more than two should never be used.

Use neither spikes nor spiked collars in dog-breaking. They are brutal instruments, which, as General Hutchinson very justly remarks, "none but the most ignorant or unthinking would employ." *

Having carefully inculcated the initiatory lessons alluded to, the trainer may then take the dog out in

* "Dog-Breaking," by Major-Gen. W. N. Hutchinson.

the fields ; being, as before, quite alone with it. He will now require a longer check-cord than that used in the yard. If forty yards in length, so much the better ; and the lightest, most useful, and durable cord for the purpose is that which sailors call "ratline."

The check-cord cannot be dispensed with in dog-breaking ; it is the best and only assistant the trainer requires.

The dog should now be taken to a spot where you know there is a covey of partridges, and there encouraged to hunt. If a well-bred dog, it will find and point them ; and if so, walk up to the dog and pat him, saying "to-ho !" then encourage him to advance steadily ; and on the birds rising, instantly check him with the cord, if he attempts to run in, by pulling him back on his haunches ; but do not use the whip for the first or second attempt, nor until you find he cannot be broken of attempting to run in without using it. After you have succeeded in this important lesson, pat and reward him with a bit of food every time he does it perfectly.

Remember also that it is a golden rule in the instruction of a dog to drag him back to the spot where he ought to have remained, whether for the purpose of pointing the game, or in obedience to the signal to "down charge !"

Having carried the course of training thus far, you may now allow an assistant to accompany you,

giving him the check-cord, whilst you use the gun and kill a few partridges ; and, in all probability, the dog will ever after take the greatest delight in hunting for game. Be strict and prompt in checking any over-eagerness or unsteadiness ; and take plenty of time in re-loading after having killed a bird, and then allow the dog to find it and mouth it tenderly.

The only troublesome thing to teach in a pointer or setter is quartering the ground. This requires perseverance and practice. It should, strictly speaking, be done before the dog is ever taken into turnips.

The trainer must teach the dog to cross and re-cross the fields to the simple signal of waving the hand to right or left ; and to do this effectually, at first he will have to walk briskly with the dog, up wind, crossing and re-crossing just as is required, but in time he will find it less and less necessary to do these walkings. Whenever the dog skips over any portion of the ground without hunting, endeavour to make him by signals go and hunt it ; and if he refuses or does not understand you, go yourself, good-naturedly calling and encouraging the dog to re-hunt the field.

A well-distributed and judicious range is a great accomplishment in a good dog, but difficult to teach.

Use the word "ware !" when the dog is hunting wrong, or attempting to precede you in getting over a fence or gate on entering another field.

On no account must the dog be allowed to move on whilst you are re-charging the gun. Though a bird falls on open, barren ground, in the very sight of the dog, and whether killed or wounded, do not allow the pointer to go or stir after it until you give the word of encouragement. If he attempts, call him back and drag him to the place where he ought to have remained ; then go yourself to the spot at which you stood when you shot the bird, and make him wait at his place whilst you re-load. It is better to lose a wounded bird now and then than to allow your dog to acquire the very bad habit of running in, which he assuredly will do during his training, unless you firmly resist every attempt that he makes.

Running in the moment the gun is fired is as bad, if not the worst fault of any in either pointer or setter. It is one that cannot be cured in any but a young dog. The ill effects of the habit of running in are such, that the sportsman had far better be without a dog than with one addicted to such habits, because, in good cover, where birds lie well and sometimes rise singly, if the dog runs in, he puts up all the others, thereby depriving the sportsman of many shots and spoiling his sport. Moreover, nothing is more annoying to a sportsman nor more likely to irritate him than a dog running in when game is flushed. It necessitates his speaking loudly or passionately to the dog, the noise of which imme-

diately alarms birds that would otherwise have lain well, causing them to get up wildly and out of range.

As a rule, a dog that runs in invariably chases game on wing, which is as bad a fault as the other.

Chasing hares.—Nothing but good, careful training in early puppyhood will prevent this, the natural instinct of the dog being to chase four-footed animals of the kind; but, once well taught, the dog will never take the liberty of chasing a hare when under the proper control of a sportsman. A hare jumps up, the well-trained dog sees it, looks at its master, as much as to say “you see that!” and comes to heel immediately.

All these faults—running in, chasing birds on wing, and chasing hares—are commonly acquired through the dog having been trained, or attempted to be trained, or shot over, by a man who is a bad shot, or who so seldom kills, that the dog becomes impatient and loses confidence in its trainer, who, when he does shoot a bird, rushes forward himself, before re-loading, to secure it. I need scarcely say that such a proceeding has been the ruin of many a splendid young dog.

Many young sportsmen, on wounding a hare, are apt, in their eagerness to capture it, to encourage a pointer or retriever to chase it; but such an encouragement is ruinous to the dog, because, after once being incited to chase, he will do so every time you miss. Such is the nature and instinct of

the dog for chasing, that the steadiest and most perfectly trained dog may be ruined by one indiscretion of the kind.

Pointers, setters, and retrievers should never be allowed either to chase, run in, or lacerate the game. A retriever may be allowed to "road" a wounded running bird; but the trainer must be very cautious never to allow the dogs to chase either hare or rabbit.

All dogs have a natural propensity to run after hares and rabbits, which must be instantly restrained in such dogs as are trained to the gun.

Never use or break a young pointer, setter, or retriever to rabbit-shooting. It is certain ruin, and will assuredly make him a hedge-potterer all his life.

When the dog is tired, do not hunt him; it decreases his zeal for sport, and injures his constitution to encourage sport to weary limbs.

Let every sportsman who uses setters remember that they require water almost every hour, especially during hot weather, or they cannot endure the fatigue of a hard day's work.

A well-broken dog seldom requires a word to be addressed to it; a dumb signal, a wave of the hand, or even a motion of the head, is sufficient.

If you want to catch the dog's attention in the field, simply whistle gently, one note only; and, on the dog raising his head, make your signal.

Never interrupt a dog when it appears to be on the scent of birds.

Remember, too, that although the dog be ever so well broken, if the young sportsman does not know how to hunt it, and insist on its keeping to the rules of instruction inculcated by the trainer, it will soon be taking liberties ; and, if these are uncorrected, the dog is soon spoilt.

A thorough-bred dog which has been accustomed to work for a good shot never works willingly for a bad one, after discovering that he seldom kills anything. Such a dog has often been known to run away off the field, and endeavour to find its old master.

A sportsman should never allow his dogs to jump or fawn upon him ; such a liberty has been the cause of many an accident with the gun.

The term "hold up!" means, to hold the nose higher from the ground. It is also the general term used when directing the dog to range or hunt the field. They are almost the only words of encouragement that should be spoken to the pointer or setter in the field. "To-ho!" need not be used very often, and, indeed, never to a steady dog. It indicates that the dog must pause until the sportsman approaches ; and then, on further encouragement, advance to the precise spot where the game is lying. Some dogs grow impatient after standing a reasonable time, and then rush in upon the game ;

others will stand ten minutes or more. General Hutchinson relates an anecdote of a dog which was left standing in the field whilst the sportsman went to a friend's house and lunched. As it is a very good story, I give it in his own words:—

“The largest price I ever knew paid for a dog was for a red setter. After mid-day he came upon a covey basking in the sun. His owner very knowingly told the shooting party that they might go to luncheon—that he would leave the dog and accompany them, engaging that they should find him still steadily pointing on their return. The promise was faithfully redeemed by the staunch setter. One of the sportsmen was so struck with the performance, that he could not resist buying at a tremendous figure, and he soon regained, I believe, much of the purchase-money from some incredulous acquaintance by backing the animal to perform a similar feat.”* This, however, is no great test of excellence; a dog that will stand very firm for many minutes may, nevertheless, have many failings.

When the dog is at a distance, and you wish him instantly to ‘down charge,’ put up your hand as the signal for him to do so, stooping the head at the same time.

It is a bad practice to call aloud to the dog immediately after firing, to ‘down charge!’ a well-broken

* “Dog-breaking,” by Major-Gen. W. N. Hutchinson.

dog needs not a word to induce it to do so, the report of the gun is the only signal necessary ; and when otherwise, the hand should be raised in a manner to indicate the order, which should be instantly obeyed. If the sportsman finds that his dog will not 'down charge' except by having the verbal order addressed to it, he would be wise to be rid of such a dog ; it shows bad and imperfect training.

False points, and pointing larks, are very bad faults, indicative of mongrel breed, or inferior olfactory organs. I never knew an instance in which a dog was cured of such faults after once acquiring them.

A well educated man can always train a dog very much better than an ignorant one.

In your humanity and good-nature be not too mild and sparing of the whip: it is sometimes absolutely necessary to use it ; but the chastisement must be given with discretion.

Use few words in dog-breaking, and fewer still when in expectation of finding game. The fewer words of command you make use of in dog-breaking, the sooner and better they will be understood by the animal under training.

In training two dogs to hunt together, let all the single lessons be first perfected before allowing them to hunt double. When those are well learnt, throw the dogs off in the field, one to the right and the other to the left, and make them cross each other as they quarter the field. Never allow one to follow

the other, or adopt their own ways ; but make them go by different routes, working up wind, and crossing right and left.

The sportsman should be cautious as to whom he entrusts the breaking of his dog, for although it is an easy art, it requires time and attention, with perseverance and constant practice : and, as bad habits are learnt as quickly as good ones, the training and education of the dog to the gun and the field must be carefully inculcated ; for it must be remembered that bad habits in a dog are even more difficult to break than in a man.

On returning home after a day's sport with your dogs, look to their feet for thorns ; and if any, extract them forthwith. Give them plenty of clean straw on a boarded floor, raised a foot or so above the ground. Never allow a dog to sleep on a bricked floor, nor in any damp place. Give them a portion of animal food with vegetables daily, when hard worked.

And bear in mind, that a dog is not able to stand two successive days' hard work so well as an active sportsman.

The dog is an excellent physiognomist, and when near enough, understands from the countenance of its master whether he is pleased or displeased with its actions.

It is sometimes evident from a dog's look and manner, that he has just been doing wrong, though

his master may not, at the moment, be aware of the nature of the wrong. In such a case the master should look sternly at the dog, so as to show his displeasure, and immediately endeavour to find out the error, which if discovered at once, the dog should be punished; but, having come and confessed the fault, natural goodness and humanity demand that the chastisement should be slight.

A dog is all sincerity of heart towards its master, and knows not how to conceal a fault or mislead him. Thus the dog may have flushed a covey through carelessness, or have chased a hare, or committed some such error; in which case, whether the fault be confessed or not, unless immediately corrected, the dog will think he may do so at any time with impunity.

Sir Walter Scott says: "The Almighty, who gave the dog to be companion of our pleasures and our toils, hath invested him with a nature noble, and incapable of deceit. He forgets neither friend nor foe; remembers, and with accuracy, both benefit and injury. He hath a share of man's intelligence, but no share of man's falsehood. You may bribe a soldier to slay a man with his sword, or a witness to take life by false accusation; but you cannot make a hound tear his benefactor."

It sometimes happens, through the ignorance or stupidity of the sportsman, that the dog is unable to comprehend what the instructions imply, or require

of him ; and in sagacious modesty, puts his tail down and comes trembling to his master's heels, telling him, through the expression of his canine countenance, that he is desirous of obliging, if the sportsman will only convey to him in the most natural and comprehensible dog-language, what his wishes are. A man who beats his dog, so failing, is a brute, and unworthy the services of so noble and intelligent a creature.

SPANIELS.

Many of the foregoing remarks under the head "Dog-Breaking," apply equally to breaking spaniels; more particularly those with reference to mild chastisement, hunting for secreted food, &c.

Among the various breeds of spaniels for cocking or cover hunting, the best are the Blenheims, the King Charles, the Sussex, and the Clumber; the latter particularly, are a strong thick-set clever looking dog, white with large light brown or lemon-coloured spots, short legs, and silky hair; and when well trained are a valuable acquisition to a sportsman.

Spaniels are lively and indefatigable little creatures, and among the most useful dogs a sportsman can employ for certain purposes. Indeed they are, by nature, so active and irrepressible, that there is

great difficulty in restraining them within bounds, or rather within range of gunshot, unless they have been very carefully trained when young.

The check-cord is the most effective instrument that can be employed, and indeed the only one with which to break spaniels.

Whilst training young dogs, always reward their good actions with little bits of biscuit or cheese: and train dogs before feeding them, not just after. The finer the olfactory organs in a spaniel, the better dog it will make when trained.

The term "hie on!" or "hie in!" may be used to spaniels when encouraging them to hunt a thicket or hedge: but such terms should never be used either to pointers or setters.

The trainer should insist on young dogs hunting the field closely: to encourage them to do so he should walk steadily, taking the field in zigzag form, after the manner required by the dog: and in giving spaniels their first lessons at the fences, do not allow them to hurry over the ground, but insist on their working it thoroughly.

Never allow them to have their own way in their early lessons.

They must also be taught to drop to the hand; and if intended to be used in the field for finding partridges, they must be taught to "down charge!"

It is not advisable that young dogs be taken too soon into coverts or other places where game is

abundant, as the cross scents puzzle them, and they roam out of sight of the trainer. Young dogs should receive their initiatory lessons and early training in open fields; and be taught to find the scent themselves, and follow it up closely. And when once a dog hits upon a scent do not interrupt him or do anything to distract his attention from the one object of following it up.

One of the greatest follies of dog-training is that of teaching a dog to hunt by sight instead of by scent. Dogs that would otherwise turn out well, are sometimes spoilt when young by such foolish practices as throwing a dead bird, or other article, from the hand, and encouraging the dog to go and seek it. Such practices may be permissible in the training of a Retriever puppy when very young: but as early as possible, all sporting dogs should be taught to hunt and seek for and by scent.

RETRIEVERS.

Retrievers are most useful and valuable dogs to the sportsman. In almost every department connected with the sport of shooting, the services of a retriever are essential. Much time is saved in recovering wounded game; and many birds are brought to bag, which without the assistance of a retriever would be lost.

The value of a well-bred and well-trained Retriever can only be thoroughly appreciated by a sportsman who has been accustomed to the use of such.

But there is no dog in which a greater degree of care is required in its instruction than in that of the Retriever ; for unless most judiciously trained, the best bred animal will be a nuisance rather than an assistance.

Mr. Folkard remarks in "The Wild-Fowler," on the training of a retriever, "Everything depends on the first lessons they receive, as to their ever being of good service to the sportsman." A remark in which every man who knows anything about training a retriever will concur : for if once a young dog acquires a habit of killing, biting, or lacerating wounded birds, it is almost impossible to break him of it effectually. Sooner or later he will again begin his bad habits.

A retriever which injures the birds it retrieves is an animal that no sportsman would allow to accompany him : for, of all faults, it is the very worst, and one which renders the dog useless for field sports.

The first lessons given to a retriever puppy should be those of searching about the yard, at home, for pieces of food which you have hidden ; encouraging the dog to seek and find them, and then rewarding him with the pleasure of eating them. These lessons should be given, at first, when the dog is hungry ;

and always when no one is present to interrupt the trainer or the puppy.

After a little practice as above, the trainer should, by means of a long string, drag a piece of savoury food through the grass; commencing at short distances, and in a few weeks extending it to fifty or one hundred yards, encouraging the dog to follow and find it; and always rewarding him with a bit of food when he succeeds. The more the retriever puppy is practised in this way the better.

It is a great mistake to throw hard sticks in the water for a retriever to fetch out. Such a practice makes the dog hard-mouthed, and spoils him for retrieving birds.

Many a retriever puppy is spoilt by children, who, innocently enough, delight in throwing sticks and stones for the dog to fetch; first spitting on them, in order (as they say) that "the dog may find it by the smell, and not bring a wrong one."

It is astonishing how soon a young dog may be spoilt in this manner, by being taught to bring hard substances, of which it always endeavours to keep possession, though the juveniles tug away at them and force them out of the dog's mouth with all their might. After such performances who can wonder if the dog so tampered with, bites and lacerates the game it retrieves?

The retriever puppy should be taught to retrieve with soft substances, having nothing disagreeable

about them, either in smell or appearance. A bit of stuffed fur is as good as anything, then a stuffed bird-skin, but never anything hard or heavy.

Never praise a dog whilst bringing, wait until he has brought and deposited in your hand, then praise and pat him.

After this and the previous lessons, the dog should be taken out into the field, being led by an attendant; whilst an elder and well-trained dog retrieves game or birds which the sportsman shoots.

As soon as possible in the field the dog should have a winged bird to retrieve, which, if it kills or bites, it should be made to understand distinctly that it has done wrong. With angry countenance the sportsman should exhibit the torn flesh, and unmistakably evince his displeasure by gentle chastisement with a small dog-whip.

This practice with a live bird should be tried over and over again, and the dog will soon acquire the habit of bringing the birds in its mouth without injuring them in the least. But should it be found difficult to prevent the dog killing or lacerating the birds, resort must be had to another expedient, viz., a pin-cushion studded with pins, having their points outwards. Put the pin-cushion in a child's sock, a cloth glove, or something soft, and then frequently practise the dog in retrieving it. If the puppy is disposed to be hard-mouthed, it should have lessons in retrieving the pin-cushion, before being taken

into the field. The colour of the sock or glove containing the pin-cushion should be frequently changed, in order that the dog may suspect everything it touches, rather than fear to bite one particular coloured object only.

The author of "The Wild-Fowler" appears to have had a retriever puppy so carefully trained in this respect, that on its first lesson in the fens, in retrieving a wild duck which was only slightly wounded, so tenderly did the puppy gripe it, that the bird freed itself from the jaws of its young captor, leaving, as it flew away, only a few feathers in the dog's mouth.* There is a beautiful engraving of this most striking scene in the work alluded to; and it is stated that the dog never afterwards allowed a captive to escape. It was, truly, a most promising error in a puppy, and one which needed no chastisement; the dog was vexed enough, no doubt, to lose so pleasing a prize, as probably the sportsman would be also, though he must have rejoiced at the perfectly successful training of his puppy retriever.

Retrievers thoroughly delight in bringing birds in their mouths; and when trained to fetch them alive without hurting them, their pleasure increases as they become more practised.

If the retriever is required for snipe or wild-fowl shooting, it should be taught in summer to retrieve

* See Folkard's "Wild-Fowler," 3rd Edit., p. 278.

birds from the water ; and afterwards, when well learned, be the weather ever so cold, the dog will not refuse to enter the water in pursuit of a dead or wounded bird.

Retrievers should be taught to deliver the game into the sportsman's hand, or directly at his feet ; and they must be restrained from running in, by practising them in the "down charge" lesson, in the same manner as with pointers and setters (see *ante*, p. 393).

The retriever should always be trained to keep close to his master when in the field, until directed to "fetch." It will then learn, in course of time, to watch the birds as they fall to the gun ; and on a signal from its master, go direct to the spot.

When a dead or wounded bird is lost, the dog should be encouraged to search diligently for it, the terms, "seek !" or "hie lost !" being sometimes used ; though most dogs that are well trained and have good noses, hunt best without any such encouragement.

About two months of careful instruction is sufficient to break a retriever, and render it useful for land or water ; but it can only be perfected by time and practice.

Close confinement, without air and exercise, is prejudicial to the dog's health : and ultimately impairs its sagacity and spoils its temper.

During the non-shooting season dogs should be

taken out almost every day with a trustworthy person.

They require watching, lest children or servants tamper with them, by sending them to and fro to retrieve stones and sticks.

Never use a retriever for killing vermin.

It is not a good plan to kennel retrievers with other dogs. And if allowed to run at large, they are in danger of being spoilt by idle persons.

The sportsman should never use two retrievers at once; one is at all times sufficient. By using two in the same sport, both are so eager for the honour of retrieving the bird, that one struggles to take it away from the other, and so the bird is sure to be torn and spoilt. When it accidentally occurs that two dogs are so situated, the sportsman should spare the dog which first captured the bird, and gently chastise the other; more particularly if the other be not a retriever.

Train the retriever (as indeed all dogs for shooting) as much as possible by silent signals; use the voice seldom; and when necessary to speak to the dog, do so with one word only, or two at the most.

SPORTING NOMENCLATURE AND PHRASEOLOGY.



Of grouse—a hatching is termed a *brood*; two birds a *brace*; several broods together a *pack*: a *cheeper* is a young grouse not fully fledged: a *poult* is a young grouse well grown and able to fly.

Of black game—a hatching is termed a *brood*; two birds a *brace*; and two or more broods together a *company*.

Of partridges—a brood is termed a *covey*; two birds a *brace*; three a *leash*; a young partridge not fully fledged is termed a *squeaker*.

Of pheasants—a brood is termed a *nide*; two birds a *brace*.

Of woodcocks—two birds are termed a *couple*.

Of snipes—two birds a *couple*; several snipes together, a *wisp*, or a *whisk*.

Of quails—two birds a *brace*; a brood is termed a *bevy*.

Of hares—two are termed a *brace*. The seat or bed of a hare is termed its *form*.

Of leverets—two are termed a *brace*.

Of rabbits—two are termed a *couple*.

A bird that has been shot at and its wing broken (whilst still at large), is termed a “winged bird:” whilst one that has been shot at and bodily wounded is termed a “struck bird.”

A *ride* is a path or open pathway in a covert.

A *glade* is a lawn or opening in a high-grown wood.

Of wild-fowl, when killed: two are termed a *pair* (speaking generally).

Of wild-geese, two are termed a *pair*.

Of wild-ducks (when duck and mallard), a *pair*.

Of mallards only; two are termed a *couple*.

The young of the wild-duck when able to fly are termed *flappers*.

Of widgeon, two are termed a *pair*.

Of plovers, two are termed a *brace*.

Of wild-fowl,* when at liberty,—

A *herd* of swans.

A *gaggle* of geese (when on the water).

A *skein* of geese (when on wing).

A *paddling* of wild-ducks (when on the water).

A *team* of wild-ducks (when flying in the air).

A *sord*, or *suit*, of mallards.

A *company* of widgeon.

A *flight*, or *rush*, of pochards, or dun-birds.

A *spring* of teal. (In Norfolk sometimes a *coil* of teal.)

* These are taken from Folkard's “Wild-Fowler.”

A *dopping* of sheldrakes.

A *covert* of coots.

A *herd* of curlews.

A *sedge* of herons.

A *wing* of plovers (when a few), a *congregation* when many.

A *desert* of lapwings.

A *walk* of snipes (in allusion to the ground they use), a *whisk*, or *wisp*, signifies a few.

A *fling*, or a *cloud*, of ox-birds.

A *hill* of ruffs.

A small number of wild-fowl, as ducks (about thirty or forty) is termed a *trip*.

Of widgeon, dun-birds, and some others, a small number is termed a *bunch*. And a smaller number (as from ten to twenty) a *little knob*.

Of swans it would be said a *small herd*; and of geese a *little gaggle*, or a *small skein*; and so of wild-ducks, a *short* or a *long team*.

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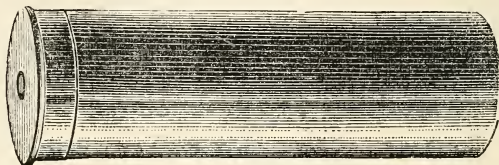
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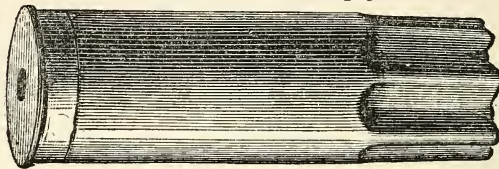
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