UC-NRLF

\$B 271 489

B 10248

THE LIBRARY
OF
THE UNIVERSITY
OF CALIFORNIA

PRESENTED BY
PROF. CHARLES A. KOFOID AND
MRS. PRUDENCE W. KOFOID

282

Digitized by the Internet Archive
in 2007 with funding from
Microsoft Corporation

THE
SPORTSMAN'S DIRECTORY;

AND
Park & Gamekeeper's Companion:

BEING
A SERIES OF INSTRUCTIONS, IN TEN PARTS,
FOR

THE CHASE IN ITS VARIOUS CLASSES:—COURSING—SHOOTING—FISHING—
THE PRESERVATION OF GAME AND DECOYS—SELECTION AND
TRAINING OF THE POINTER AND SPANIEL—BREEDING
PHEASANTS—PARTRIDGES—RABBITS, ETC.

WITH
COPIOUS DIRECTIONS FOR TRAPPING AND DESTROYING VERMIN, AND
DETECTING THE OPERATIONS OF THE POACHER.

TO WHICH IS ADDED,

AN APPENDIX,

Containing numerous valuable Receipts, and useful Abstracts of the Game
Laws, and the Laws of Coursing.

BY JOHN MAYER,
GAMEKEEPER.

THE SEVENTH EDITION,

Comprising the most recent Changes in the Theory and Practice of Sporting.

LONDON:
SIMPKIN, MARSHALL, AND CO.

MDCCCXLV.

LONDON:
GEORGE WOODFALL AND SON,
ANGEL COURT, SKINNER STREET.

SK 31
M 3
1845

PREFACE.

THAT conventional diffidence of tone, which is the ordinary characteristic of a preface, may conveniently be dispensed with in an introduction to a seventh edition. Some half dozen years ago, the revision of John Mayer's quaint, honest little manual, for the professional sportsman, was entrusted to the Editor of the present volume, who then almost wholly re-wrote it, and made such additions as rendered it, so far as it went, complete. The sixth edition being consumed, and the changes which time always brings about having affected some of its details, the Publishers resolved upon having them amended, and offering the old Gamekeeper a seventh time for public patronage and approval. He who has once again to crave allowance for his homely original, has the grateful duty to perform of returning his acknowledgments.

for the flattering reception already extended to his *protegé*,—added to the pleasant hope of success for his present, from the prosperity of his former venture.

London, January, 1845.

CONTENTS.

PART THE FIRST: THE CHASE.

	PAGE.
Stag Hunting	1
Fox Hunting	4
Hare Hunting	9
Otter Hunting	12
Badger Hunting	12
Training Hounds	13
Coursing	17

PART THE SECOND: SHOOTING.

Use of the Gun	20
Flint and Detonating Guns	22
Beating for Game	26
Deer Shooting	28
Pheasant Shooting	30
Breeding Pheasants	31
Partridge Shooting	33
Grouse Shooting	34
Woodcock Shooting	36
Snipe Shooting	37
Wild-fowl Shooting	38
Dotterel Shooting	40

DOGS USED IN SHOOTING.

Breeding, Selection, Training, Treatment	41
Selection	46
Training. To break the Spaniel	50
To break the Pointer	50
Treatment	54
Directions for the Gamekeeper	57

PART THE THIRD.

	PAGE
Preservation of Game	59
Preservation of Fish	63
Decoys for Ducks	65
Pigeons	67
Description of the various sorts of Pigeon	70

PART THE FOURTH.

Various ways of taking Pheasants	76
Resorts of Partridges	80
Various ways of taking Partridges	82
Taking Partridges with Birdlime	83
To take Woodcocks by Draw-Nets, &c.	84
To take Woodcocks with Birdlime	93

PART THE FIFTH.

Methods for taking Small Birds	94
To take Birds with Birdlime	101
For taking Small Birds with Lime Twigs	105
Another Method	108
To take Wheat-Ears, Larks, and Quails	110

PART THE SIXTH: RABBITS.

Rabbit Shooting	116
Ferreting Rabbits	117

PART THE SEVENTH.

Fish Ponds	118
Fishing	119
To take and preserve Eels	126
Preservation of Live Baits for Angling	127

PART THE EIGHTH: VERMIN TRAPPING.

	PAGE
For taking Foxes	128
The Polecat	132
The Stoat	133
The Weasel	134
The Mole	135
Buzzards, Kites, Hawks, &c.	137

PART THE NINTH.

Téchnical Terms used in Sporting	142
Colours and Marks of Dogs	147

PART THE TENTH: RECIPES.

To destroy Rats	148
For trapping Woodlarks and Nightingales	148
Food for them	149
Rheumatism in Dogs	149
To make a Dog inclinable to copulate	150
Hovering in the Lights	150
Mange	150
Red Taint or Mange	152
To make a Dog fine in his Skin	152
To destroy Worms	152
Another	152
Another	152
Distemper	153
Another	155
Worms	156
Wounds	156
For a green Wound	157
To cure Mange without Scent	157
Purges	157
When a Dog strips in his Feet	157
Sore feet	158

	PAGE
External Canker in the Ear	158
Another	158
Internal Canker	159
Swelling after bleeding	159
Canker in the Teeth	159
Films over the Eyes, Clouds, &c.	160
Old Wounds or Sores	160
Distemper in the Kidneys	160
Another	160
Strains	161
When a Dog looks heavy, &c.	161
Swelled Seats	161
Bruises in the Joints	161
To prevent Hydrophobia	161
When a Dog is Poisoned	162
Torn Ears	162
Staggers and Fits	162
Bilious Complaints in Dogs	162
Food for Greyhounds when Training	163
Fleas	163
To Cure the Skins of Dogs, Foxes, &c., &c.	163
How to administer Medicine to Dogs	164
To case-harden Locks	165
To colour the Steel Furniture of a Gun	165
To bring the Grain up in Gun Stocks, &c.	165
To preserve Gun Barrels from Rust	166
To colour Gun Barrels	166
To render Boots Waterproof	167

APPENDIX.

Selections from the Game Laws, more immediately appertaining to the Duties of Gamekeepers	169
The Laws of Coursing	176

THE SPORTSMAN'S DIRECTORY.

PART THE FIRST: THE CHASE.

STAG-HUNTING.

THE red-deer, or stag (*cervus elephas*), with the exception of the roe, the only species of the deer tribe indigenous to this country, is still an animal of chase in England, though no longer drawn for, or hunted as a wild animal. Stag-hunting, as a wild sport, gradually decreased, as the inclosure of waste lands and a high system of cultivation advanced. The only county in which it now exists is Devon, where the extensive moors still occasionally afford a run with a wild stag. Though, as a rural sport, it is entitled to a notice here;—from its very partial existence, a brief allusion to its details will be sufficient for all ordinary purposes.

The stag-hound, once so renowned, is no longer bred for, or used in, this description of chase. In the Royal Kennel, the most extensive, as well as perfect stag-

hunting establishment in Great Britain, the breed consists of careful crossings of the purest fox-hound blood in the kingdom. With the exception of a more rigid discipline, necessary in organizing an absolute obedience in the field, the treatment of the stag-hound and the fox-hound is the same. The method of capturing and treating the stags, intended for the use of the field during the season, is a novel feature, however, in the annals of the chase, but a most important item in the sport of stag-hunting. The system of taking them depends, of course, mainly, upon local circumstances; that adopted in Windsor Forest is thus pursued. As soon as a herd of stags is met with, it is given chase to by a mounted party. From the season of the year, (August or September,) the deer, fat and unfit for strong or continued exertion, are soon blown and easily overtaken. The individual to be captured, once fixed upon, the slightest demonstration ensures his rejection by the herd; he is abandoned and driven away. He now becomes an easy prey. A burst of a mile or two forces him to take soil. There he is permitted to remain till the keepers with their lassos come up; the noose is thrown around his antlers; he is bound and consigned to a cart. Should he bolt from the water during the operation of lassoing, a rough kind of greyhound, trained for the purpose, is slipped at his haunches, who seizes and holds him till he is secured. The stag intended for the field is kept upon dry food, hay, beans and corn, his treatment being as artificial as the purpose for which he is meant.

Outlying stags are occasionally drawn for. When unharboured and imprimed, they will make head straight across the country ; and when closely pursued will return to the herd, put up another, and sink into his place, particularly when in the grease, by which means they save one another. To prevent the change, you should take the marks of your stag.

The buck (the male fallow-deer) will do the same ; running, however, a smaller ring, the former being more venturous. They haunt, in November, in furze and thick shrubs ; in December, in high slopes ; January, in young wheats and rye ; February and March, in thick bushes ; April and May, in coppices and springs ; June and July, in out-woods and purlieus, near young corn.

When you are in search for outliers, either stag or buck, go up wind early in the mornings, to find them at relief or feed, when you may watch them to cover. This done, go for a bloodhound ; take him upon the lyam, or cord ; try the ring walks, entries, goings out, &c. ; and where you find fresh view or slot, and fumishings in the rides and glades, make blemishes and splashes in the slope. These, in case your dog overshoot, will enable you to draw counter and recover your beat. You will know when you are near the stag, by the dog's bearing hard upon the lyam, and beginning to lalise, or open, which you must prevent. When found, if he is for a hunt, have the hounds upon a side lay, near where you think he will pass. Rouse him up ; when imprimed, loose your hound, and give the signal for

laying the pack upon his trail. As he tires, his coat becomes black. He will then lurk, skulk, and sink—lying down with his legs doubled under his belly, and his nose to the ground, to prevent the scent flying. Hounds are then likely to overshoot him; in that case the system for his recovery is the same as when fox-hounds are at fault, and will be found treated at large under that division of the chase.

The ceremonials formerly used on the death of a stag are become obsolete in this country. Some of those practised on the Continent are singular enough. In Germany all who are present at the death are required to pull off their gloves, or redeem them by a fee to the huntsman; the unfortunate Louis XVI. never failed to take off one of his gloves on such occasions.

FOX-HUNTING.

As far back as the reign of Richard the Second, the fox is found to have been an animal of chase; but hounds exclusively kept for his pursuit have not existed more than a century and a half. During that period the whole system of fox-hunting has undergone a change, not alone as regards the chase itself, but even the time of day dedicated to it. As, however, an historical notice of that sport does not suit the purpose of this book, we at once proceed to offer the best practical hints for the management of fox-hounds in the field, and to suggest how best

science may operate in furtherance of the modern taste for that most popular of British rural sports.

In drawing for your fox, the size and nature of the cover, and the state of the weather, must be principally your guides. With small patches of gorse, the only general rule to be observed is, to suit the strength thrown in to the space to be drawn. A large body of hounds, in a small cover, will chop more foxes than they will unkennel. In one of moderate extent, with calm weather, draw up wind, that he may not hear you too soon; in a storm, cross upon the wind, lest you come upon him before he is aware that hounds are near him. The hour of trial for a huntsman is that with which the business of the day commences. When you throw your hounds in, cheer them as if your heart was in your voice. Let all you do be done with animation. Cheer them as they draw; it gives life to yourself, to them, to your field; remember spirit is the very essence of fox-hunting. Never lend yourself to assist hounds in chopping a fox; do not be deceived about the necessity for blood—recollect stag-hounds do not want for dash, and they rarely taste it. Should a fox by accident be chopped, if the cover be small, do not let them eat him in it; nothing is so likely to cause its being abandoned for the future.

When your fox breaks, do not suffer him to be tally'd till well clear of the cover, as it may head him back into the mouths of the pack. Once fairly away, get the body of hounds upon him if you can; but do not

go without some strength. Blow your horn, that the field, and your whips in particular, may know that he is gone. These should cheer and not rate to cry; hounds should be taught to regard the first tongue thrown as a sound to be flown to with pleasure—not a signal to be obeyed by crack of whip. When they settle to the scent, keep well on their line, with your eye to the body, as the least likely to overrun it.

Should they check, let your first cast make good the head; to know where he did not go is next in importance to the knowledge of where he did. Bear in mind this is the most trying of all difficulties; the first check is the moment of greatest peril. Hounds rarely check upon a fox that is forward, unless from taint; if he has turned, he has been headed, or has fixed upon a point which he has determined to make good. Do not now get among your hounds, nor suffer the whips to scatter them. Get them speedily back to the spot up to which you know they brought him; and, once there, let them spread and use their natural sagacity. If you require to cover a large space, make two divisions, casting one yourself, your first whip doing the same with the other. Let it be ever present to you, that, while you are at fault, your fox is not; and that, as the distance increases between you, the chances multiply fifty-fold in his favour. When hounds are to be stopped, the less threatening the better; they should not be allowed to associate the ideas of fear and the field together. When hallooing to a scent, take care that you do not drown the

note of a hound that has thrown tongue; trot quietly up to a cold scent, bringing hounds up on their mettle most likely will cause them to run on the expectation of it. If you have viewed your fox to ground, and it be such an earth as you can bolt him from while the pack is on fire, let them have him, unless some strong reasons induce you to spare his life. Hounds are little served by blood when they are cooled, and their courage is down; a fox thrown among them after an hour or two spent in digging is only a fox sacrificed, and one more chance of a blank day. The change of the hunt is an accident impossible to guard against, and very difficult of detection. Your staunchest hounds will generally keep to the first scent, and you must use your knowledge of your pack in such cases as your safest resource. It will serve you to bear in mind that the scent of a dog-fox is much stronger than that of a vixen.

The head whipper-in must be completely under the command of the huntsman, always maintaining his halloo, stopping the hounds that divide or run from it, and getting immediately forward with them to the huntsman. His station, whilst drawing the covers, is always on the side opposite to the huntsman, keeping near enough to him however to hear and obey his halloo. While the huntsman is riding to his head hounds, the whipper-in may be useful in various ways; he may clap forward to any great earth that may by chance be open; he may sink the wind to halloo, or mob a fox when the scent fails; he may keep him off

his foil, stop the tail hounds, and get them forward; and has it frequently in his power to assist the hounds. The most essential part of fox-hunting, the making and keeping the pack steady, depends entirely on the first whipper-in, as the huntsman should seldom rate, and never flog a hound.

In turning his hounds, the whipper-in should perform his office as quietly as possible: if he rate and crack his whip, they cannot be expected to draw: naturally they will throw up their heads, and leave so much ground untried. If they draw towards the huntsman, he should let them alone, merely riding behind them in his direction. Always let him hit the hound offending first, and rate him by name after: he need not spare the thong if the fault be one deserving punishment, but hit him always behind the shoulder, or as far from his head as possible. Rioting, a generous fault, is to be cured by vigorous and decisive measures; for skirting, there is rarely any remedy except the halter. When difficulties occur, the less the speculative opinions of the field are listened to the better. Let a huntsman then watch narrowly his trustworthy hounds, and at the same time weigh the probable points that his fox would make: thence only can he hope for assistance, or counsel to be relied on.

When there are various scents, and the hounds divide, so as to make it uncertain which is the hunted fox, let the whipper-in stop those hounds farthest down the wind, as they can hear the others, and will reach

them soonest ; it is useless to attempt stopping those up the wind. In heathy countries, in dry weather, foxes will run the roads ; and if gentlemen then ride close upon the hounds, they may drive them miles to no purpose without any scent, as high-mettled fox-hounds will seldom stop whilst horses are close at their heels. Sheep and birds, by their running and chattering, often give indications of the point of the lost fox. These, however, and many such, are more points of practice than general rules for fox-hunting. The ordinary code of field instructions is comprised in the observations which we have here epitomised : they are the charts by which the huntsman may steer ; it must depend upon his own skill and care, to turn them to profitable account.

HARE-HUNTING.

TIME, that changes all things, has not been idle with this division of the chase. Not only is the system of hunting different to that formerly pursued, but the kind of hound used for it is essentially altered. Instead of the slow, deep-mouthed southern, the diminutive beagle, or harrier, a sort of composition between both, the dwindled fox-hound, is now generally employed in hare-hunting. If we understand by the word harrier, the dog constituting a pack of hare-hounds, we shall find him not of any peculiar species, but a combination of various breeds suited to the

country for which they are intended. Hares now are never trailed to their forms. In drawing for them in the open, the huntsman will do well to remember that on their seats they have little or no scent, and that when started in cover they will frequently hunt the hounds for the purpose of making foil. If the scent be true, the cry will grow more faint; if it be forward, it will increase; this is the best guide when hounds are hunting out of sight, though it is, by no means, at all times to be relied upon. If you hear your hounds break cover, without being able to discover for what point they are making, it will assist you to know that a hare almost invariably faces the wind.

Once on foot, you will find her make use of many artifices, such as running to a head, heading back, thereby foiling the ground; then throwing two or three times, and making head again, which puts the dogs to a check, causing them to overshoot, and gives her an opportunity of throwing in again, and returning on the foil. In this case, make your casts counter till you come to her home, where you will find her. Sometimes, when she is very hard run, she will take vault: sometimes, after several throws, she will lie down, take to the water, &c., and let the hounds overshoot. The more that good-seasoned hounds are left to themselves, the better they will hunt, the more sport they will afford, and the more surely kill: in general, they are too much hallooed. A hare should be patiently followed through all her doubles, for in this consists the fair

sport of hare-hunting. Remember that stillness and silence are indispensable. Should she be headed back, which often happens, either from the speed of the dogs, or from her constant aim to double, the pack will generally overrun the scent: it is therefore proper to keep a considerable distance behind the dogs, that, left to their own efforts, they may perceive their loss, turn, and recover. The greatest difficulty with which the huntsman of harriers has to contend, is the chance of running heel; hounds are so fond of scent that they will hunt when any is to be found. An intimate knowledge of the disposition of each hound in his pack, is his best refuge in such dangers. Let him sit quietly and watch them closely. His old hounds will take the hint when they see him pull up, and if he be silent, set diligently to inquire his reasons. If he then discover that they are not confident in carrying it forward, he may be certain that they have been running heel. No rule can now assist him, save that in lifting his hounds he hold his peace. When he speaks they naturally expect he has something to communicate of moment, and up go their heads to catch it.

Hares, when out of their knowledge, always run well: if they start down wind they seldom return, and then hounds may be hallooed, encouraged, and pushed. In the field, be careful not to ride over the dogs, speak to them in time; and in roads and paths pull up and make way for them. On all occasions, when it is possible, avoid riding on the line of your tail hounds: it

is a practice on every account objectionable : they are constantly in jeopardy from it, and where scent has been overrun, it will probably be irretrievably ruined. Let the young huntsman ever bear this maxim in remembrance, that care and patience are the surest substitutes for the practice and experience of his elder brethren of the craft.

OTTER-HUNTING, one of our earliest sports, and formerly very popular, is now nearly obsolete. There are but very few packs kept in England for the purpose, and they are quite private. That the pursuit of this most destructive animal, for its extirpation is of infinite importance to the lover of the angle, all who know the vast mischief done by it to our waters, are aware. In 1804 one was killed near Leominster, that weighed thirty-four pounds and a half. Its age was supposed to be eight years ; and it was calculated that during the latter four or five, it consumed annually a ton of fish. We shall return to the otter when we have to speak of the trapping of vermin.

BADGER-HUNTING is still more rare, but as, occasionally, instances occur in which a knowledge of the animal's habits and resorts may be found useful, it will be as well briefly to allude to them. During the day he chiefly confines himself to his burrow, a strong earth,

with numerous ramifications. At night he goes abroad in search of his prey. That is the time to bag all his entrance holes, and, leaving persons to watch them, to commence your chase with a few staunch and resolute bull-terriers. Pasture ground, on which cattle have fed, is a likely place to find a badger, hunting under the dung for grubs : the borders of preserves, too, are frequently his haunts, as he is very partial to game. Moss heaped up in cover, or cow-dung newly disturbed, are sure signs that he is not far off. Once put up, he will run directly home, where your bags will secure him. Fires lighted at his earths will keep him out, if it be your object to have a run rather than to make sure of the quarry.

TRAINING HOUNDS.

FEEDING-TIME is generally chosen for teaching young hounds to answer to their names, and for enforcing other habits of obedience. The hounds should be called singly, and by name, to their meals. Those called should immediately approach you, and be taught, when touched with the handle of your whip or switch, to follow you close. A roll-call should be made of all the hounds in and about the kennel, several times in a week. Severe discipline should be kept up among them, but no periodical or general whippings be resorted to, which are at once barbarous and useless. The huntsman, or feeder, should sleep within hearing of the kennel, lest

his hounds should become disorderly and riotous in the night.

Dogs sometimes take a particular antipathy against one, which they will fall on in a body: when symptoms of this kind appear, he should be removed. Bitches should be withdrawn on the first symptoms of their heat, and young unentered dogs separated from the pack. Hounds should be well kept between the seasons, and prevented from growing fat by exercise: a good swim in a river once a week, with a long run after it, will be found very beneficial. Young hounds should be branded on the side with the initials of their owner's name, to prevent loss or dispute. Their ears should be rounded at six months old in cool weather, that they may not bleed too profusely; but this operation should not be performed whilst they are under the influence of distemper.

Spaying is seldom done effectually; a very skilful person should be employed; for if the bitch be not cut clean, she will be troubled with her periodical heats, although barren. A young bitch may be spayed about a fortnight after her first conception, but probably the safest time is whilst she suckles. When spayed bitches do well, they are amongst the best of their species, being firm-fleshed and good runners, and extremely serviceable in a pack which hunts late in the season. In breeding, never put an old dog and bitch together; and never breed from either that are unhealthy. It is the judicious cross that makes the complete pack: if

you find a cross succeed, always pursue it : if a favourite dog skirts a little, put him to a thorough line-hunting bitch, and such a cross may succeed. Be cautious of breeding *in and in*. Young hounds are usually put out to walk, or keep, till old enough to be admitted into the kennel ; when they return from this their first school, become reconciled to the in-door discipline of the kennel, and will readily answer to their names, it is time to couple them, in order to take them abroad to complete their education. Couple dog and bitch together as far as practicable. Young ones which are troublesome or awkward, may at first be coupled with old hounds : they must not be coupled carelessly or loosely, or the young dog may slip his collar, and, being frightened, stray away. Collars with the owner's name should be put on such as it is feared may stray. A few couples at a time should be taken out at first, and taught to follow the huntsman on foot : they must next be taught to follow the horse ; then to run in company, without skirting or skulking ; to be strictly obedient to the voice of the huntsman ; to beware of hunting improper objects ; to be staunch to the scent they are designed to be entered on ; and then they should run one or two trail scents, as trials. It will be now proper to lead the fox-hounds amongst those animals which they should neither touch nor notice ; the most important of which are sheep and deer. A few dogs may be uncoupled among the deer or sheep ; attendants, being ready with their whips, should walk up and

down, caressing those dogs which are quiet, and chiding those which notice the sheep; threatening them with the smack of the whip, and calling out perpetually, "'Ware sheep!" not failing to flog those severely which are inattentive; this must be repeated in the most strict and severe manner, as often as it may be necessary. The fox-hound must next be taught not to run at the hare; and this lesson must be given in the field, as with the sheep.

Young fox-hounds must be first stooped to a vermin or strong scent, such as the martin cat, badger, or fox: and when once well blooded, they will retain an attachment to the scent, a fondness which must, however, be strengthened by discipline. To make a trail scent, a cat may be killed and spread open, and dragged over the land intended for the run: some prefer a bunch of red herrings. Two or three couple of the steadiest and best nosed line-hunting hounds should always be present at the training of young hounds, as the example of the former is of great service in perfecting the young dogs. The old hounds should take this in turn. The young pack may now be entered in that part of the country which it is intended they should hunt in the season, and be blooded to their proper game. For fox-hounds, cubs must be found in the covers, or bag foxes provided. They should be inured early to the strongest and thickest covers, where the martin cat may be found, whose scent is attractive to hounds; only a few couples of puppies at a time should join the pack.

COURSING.

THIS sport comes properly under two heads ; some persons keeping greyhounds wholly for the purpose of public racing for prizes, others using them merely as instruments of private amusement. In both cases, however, the rules for breeding, rearing, and training, are essentially the same. There is a popular fallacy existing in many districts where coursing is only followed as a private pastime, that greyhounds for mountains and rough wild downs should not be too highly bred. There is a passage in Beckford that applies directly to such impressions :—"I have often heard, as an excuse for hounds not hunting a cold scent, that they were too high-bred. I confess I know not what that means ; but this I know, that hounds are frequently *too ill-bred* to be of any service."

The fine thorough-bred greyhound, known to all coursers, is no new species, (though, until the hare became the quarry in coursing, the wiry-haired race was used as alone fit to pull down the mountain and forest deer,) as, in its silky coat and blood-like shape, it is found in most of the pictures of Charles the First. No doubt it has since undergone many changes for the better, more especially in the crosses to which it was subjected by the skill and industry of the late Lords Orford and Rivers. All that the moderate courser of the present day

has to attend to is, how he manages the best blood that he can now procure at little trouble and moderate outlay: of course the brief treatment of the subject in a work of this nature, is not intended for such as keep large studs for public running.

The earlier in the year you breed, the better; late puppies rarely turn out well. When you put a favourite sort to the dog, it will be a serviceable precaution to have another bitch warded at the same time, which will enable you to rear all your litter without injury to the dam. The advantage from this system is, that you will have trial of all your produce; when you destroy any, you *may* destroy the best. This was Lord Orford's system: he never got rid of a puppy till he had experience of his quality. When the whelps are removed, it will serve the mother to give her some gentle medicine; three purging balls, one every other morning, will be found to set her right sooner than if nature were left to herself. For rearing greyhound puppies, the same general rules apply as with all others, except that being more delicate they require a greater share of care and attention. Their bitterest foe is distemper, so long considered as beyond all hope from human aid or skill. Modern improvement seems to have, at last, found a remedy for that formidable disease: in the Appendix a recipe is given, as infallible, upon an authority there is every reason to respect.

The maxim that "the good that is in a horse goes in at the mouth," is equally applicable to stock of all de-

scriptions. Above all, let it be ever present with those who rear greyhounds—that if neglected in their youth, no after process avails them aught. Their food should be substantial, such as oatmeal and broth, very thick, oatmeal cakes made thick and soaked in tepid milk, and flesh hung up so that they may have to use exertion to reach it; the pulling at it giving liberty to the neck and strength to the jaws. Never confine them long. Constant exercise is as necessary to the development of their powers as judicious feeding. Let them accompany you as much as possible in your rides and walks—in the former, as they grow in strength and age, increasing the speed when an opportunity is afforded of doing so, without injury to their action, the certain consequence of fast work on roads or other hard surfaces. A greyhound, to be symmetrical, should be shark-jawed, prick-eared, with a long neck, thin withers, deep shoulders, broad hooped back, broad loins, flat sides well let down, deep gaskins, straight legs, short from the hock to the pastern joint, thin feet, pointed, a very long fine stern, and large floating veins. It will improve greyhounds' looks, and save their health, to dress them daily with a moderately hard brush, using a little oil.

PART THE SECOND: SHOOTING.

USE OF THE GUN.

THE first object, in acquiring the use of the gun, is to get the better of any trepidation or apprehension at the moment of discharge; till this is done, no accuracy of aim can be hoped for. In order to this, the learner should first shoot at a dead mark, and then proceed to sparrows, which in their covey and flight most resemble partridges, and are for this reason to be preferred to swallows; besides which, they are a mischievous bird, while the latter are highly useful in the destruction of insects, and they are too difficult an aim for a young beginner. In presenting the piece, place the left hand near the guard, almost on a level with the right; but a long or point-heavy piece must be held with the left hand farther extended. In taking aim, it is best to keep both eyes open. In firing, the point of the gun, or sight in a right line from the mark upon the breech, should be levelled point-blank with the object; and then the finger must instantaneously pull the trigger, as on this quickness of the hand the whole art of shooting depends. On all occasions look your danger full in the face, and steadily at your mark. Partridge shooting is generally the first sport attempted by the

young gunner, for which purpose one or two dogs and an experienced friend are quite sufficient company. Be circumspect and deliberate; the dogs standing and the birds having been sprung, in a moment calculate the proper distance at which to fire, and then cock and shoulder the piece. Always aim at one particular bird, not firing at random at the whole covey, or "into the brown of them;" and, till well accustomed to shooting, always aim at the object point blank. A bird may be permitted to advance from fifteen to thirty yards from its springing, before the gun is cocked, and the shot may be made from thirty-five to fifty paces distant. Experience will soon direct the sportsman to fire full a hand's breadth before the bird, at a distance of forty yards, and from that to a foot or upwards, should he have a long shot.

In shooting, flying or running, let the object get a fair distance before you take the gun up: then throw it upon the object at full sight, and pull instantly. The finger being a day's march behind, is the principal cause of missing, as that gives liberty or time for flinching. Never carry your gun with the object, nor shoot before it, as it cannot get out in the compass of a point-blank shot, and it may turn, in which case your shot will pass it. If you are fond of snap-shooting, which is requisite in cock and rabbit shooting, mind never to hold full upon the object at short distances. If a side shot, take its head; if going from you, take its wing. Never shoot full at coveys; called "flanking them," &c.

When you miss, and seem confident that your sight was good, depend upon the fault being in the finger not obeying the eye ; therefore be not intimidated, but endeavour to pull quick the instant you see the gun cover the object : you cannot be too sharp ; stretch your eyes wide open, and look hard. If you feel disposed to flinch, take a sandwich and a glass of brandy ; after which, stand as still as possible at least five minutes, and then proceed. There are many directions in which your objects fly and run, but none can get out in the compass of a point-blank shot. Pheasants and woodcocks (being in cover) will obstruct your sight, by flying right before a tree, holding their heads back, to keep the direction ; in which case you must immediately step aside.

FLINT AND DETONATING GUNS.

THE principle of ignition by percussion cap and detonating has now become so general as to have entirely superseded the old plan of discharging sporting guns by means of flint and steel. A few of the old school still insist that there is nothing like flint ; that the gun so supplied shoots stronger than the detonator, while Young England would scorn being seen in the field so appointed. The truth is, in point of igniting the charge there is very little difference between the time consumed by the two principles. If this be so, the superior convenience of the detonator can admit of no question. Let your flint

lock still decorate the sides of pistols and blunderbusses, for domestic purposes, but circumvent your game with copper caps. As the construction of the detonator differs materially from that of the flint gun, the following suggestions will not be out of place.

TO CLEAN DETONATING GUNS.

1.—Commence the process by clearing from the surface of the gun any impurities that may be on it.

2.—Clean perfectly with a wet rag, as soon after use as possible, every part of the breech and lock on which the detonating powder acts, and the pegs with wet tow: should you only do this as a temporary cleansing, rub the wet places dry, and give them a coating of oil; indeed, a wash of oil all over the piece will be no bad precaution.

3.—To take the barrels from the stock, place the handle of a turnscrew against your breast, and pressing the stock against the barrels, slide your fore-finger to the end of the screw. This will act as a prop, and steady your lift on the bolt's head: during this process, let the locks be at half-cock.

4.—Having released your barrels, put them into a pail of water, and oil carefully your stock and ramrod.

5.—Fill both barrels with cold water, and rinse them till it runs out without being stained; then place them near the fire, with the muzzles downward, and let them

drain perfectly. Then put clear water into the pail to the depth of six or seven inches, and having prepared your cleaning rod, work it up and down till the water is driven through the pivot holes quite clean : repeat this system with hot water and a clean washer.

6.—This done, dry the outside of the barrels, and again set them up to drain. In a few minutes dry the inside also, by means of a rod tufted with flannel : you must change the latter frequently. You may ascertain whether your work be perfectly done by placing the peg-hole opposite the flame of a candle ; if it be clear, out goes the light.

7.—Finish with a strong brass brush till you remove the lead ; after brushing it lustily up and down for a few minutes, turn the muzzles downwards, strike them against a piece of soft wood, and the lead will drop out. Do not force the brush too near the breech.

This chapter on the detonating gun cannot be more appropriately wound up than with the following directions, published several years ago in a pamphlet written by that eminent artist, Purdey.

“ Load with the cocks down, which prevents the powder from being forced out of the pegs that receive the copper caps. When ramming down the shot, observe the distance the end of the brass worm is from the muzzle of the barrel, to prevent overcharging. Always ram down hard.

“ Prime the last thing : otherwise, in ramming down

the wadding, the powder will be driven into the caps, and become so firmly compressed as to destroy their effect.

“Should the caps be put on by mistake, prior to loading, force them off with a turnscrew, and replace them with new ones.

“Never put the cocks down upon the caps when the gun is loaded, as it compresses and spoils the detonating powder, and is very dangerous, the cocks being liable to be lifted up by catching hold of any substance, and their falling will explode the gun. If left at half-cock, this cannot possibly happen.

“Keep the copper caps dry; if exposed to the fire for a few minutes, when required for use in damp weather, they will never fail. Take care that no oil or grease gets to them.

“The caps made with the purified detonating powder should always be used in preference to those which are made with fulminating mercury, and called ‘anti-corrosive.’ This powder is dangerous, as it inflames with very slight pressure, and detonates with such extreme violence, as frequently to burst the shields of the cocks, and split the pegs. It also wears them out in one quarter the time the other does, and is likewise very foul, and will not keep: it injures, moreover, the inside of the barrels and breeches.

“For cleaning the detonating lock as at present constructed, the following implements will be required,—as also for taking it to pieces previous to the process:—A

spring cramp, several small turnscrews, two or three hard tooth-brushes, and a penknife or scraper.

“ In taking the lock to pieces, first let down the cock, and having provided means for keeping the various screws, &c., distinct from each other, remove the main spring, with the aid of the cramp. Next take off the bridle; then press the scear against the scear spring, and with the other hand push the cock back as far as it will go. Let the scear spring then go back, and the scear pivot will come out easily, which will permit the scears being removed. Unscrew the scear spring screw, and lift out the spring.

BEATING FOR GAME.

You will know if there is game in your beat by scratchings, buskings, racks, and paths in the fields and covers; creeps and muses at the sides and in the hedges; crottes and droppings about them; chalkings and markings of woodcocks in the rides round ponds, &c., in covers; mutings of snipes in marshes, meadows, fens, spring-heads, &c. Grouse frequent the hang of the hills, by the bogs. When they discover you, the cock challenges, when they all run or take wing, and will go a mile in a straight direction and then drop. Pheasants are found in young rough covers, the first fortnight; after which, being disturbed, they go to the high slopes, where, the leaves being on, they save themselves for a while, and beat you. Early in mornings,

and late in afternoons, you will find them roading: then, if your spaniels are good, not hanging on the haunt, babbling, and plodding, but quick in taking the "road," and knowing the toe from the heel, you will be able to get shots at them before they reach the high slope.

Partridges you will find in turnips, stubbles, rough grounds, shady places, clovers, grass, and particularly in fresh broken-up woodlands, where there are plenty of ants' eggs: these are famous breeding grounds. In the pairing season, which is called their wooing time, (the proper season for training young dogs,) you will find them chiefly in fallows and turnips that are left until April: it is then time to leave off, as they are at nest or nesting. In the season, when they become wild, use babbling spaniels round the fences near turnips, which will cause them to run and lose each other: they will then lie close, and enable you to pick them up singly. You will often see a whole covey take wing, and fly straight ahead two or three fields. Many sportsmen will pursue and beat very close for them, which is generally in vain, as they often take a circuitous route, and return scudding under the hedges; therefore, if you are inclined to find them, return, and beat the grounds from whence you drove them first. Much fagging might be saved gentlemen, by the keeper's going forward and beating the bare grounds with a racing terrier, that has plenty of tongue. This mode will bring the birds into less compass.

Hares you will find in the standing corn, which they

will follow, as long as there is any ; from whence you should drive them with beagles, waiting for them at the gates, &c. After the corn is cut, they go to the turnips and stubbles, where you will generally find them about a hundred yards from the sides, some in the fences, &c. In wet weather they lie on the hills, and in dry weather in the valleys. In their breeding time they like damp grounds, as it cools them.

Quails you will find in the stubbles ; rails in the standing barleys, clovers, &c. ; and woodcocks by the sides of the rides, walls, rotten banks, and ponds, in cover : where, when you are beating for them, boys should be placed on trees, to mark : if you wish not to disturb the game, have some to brush, or close-mouthed dogs, which they do not much mind.

DEER-SHOOTING.

DEER-STALKING, as a wild sport, is, among us, so much confined to the remote districts of Scotland, and, even there, so dependent upon circumstances wholly local, that it is not considered necessary to enter into its details in this epitomised volume. In shooting park deer, (an operation generally delegated to the gamekeeper,) he should be careful to ascertain their ages, and whether they be in high condition or not : particularly if the does be wet or dry. He should never shoot end-ways. A buck should be shot through the head ; a doe through the shoulder, as a bloody shoulder is held in high esti-

mation. Immediately after they have fallen, run up and cut the throat. Be as expeditious as possible in lacing, casing, drawing the shoulders, paunching, &c., as the fat will pull off with the skin, and the buck, in hot weather, will turn green. Some break deer up hot, others the next morning: the latter is best. They are generally ridden to the gun, though lying in wait for them in a tree, or close copse near their walks, will answer the purpose in most cases. As these observations apply to the duties of the gamekeeper, the following hints will also be of service to him.

To know a wet doe from a dry one, observe her coat: if she is dry you will see little twists of hair sticking up, which are called quills: she will set her head and single up high, and appear more round and straight. The wet doe looks heavy, stalks along slowly, hanging her head and single low. These are the most prominent marks, and can scarce be mistaken. Should you want to take them to removes, or bucks to stall-feed, if the stall or lodge is not constructed properly for that purpose, build a pen where they are usually fed, near a tree, with hurdles double height. Have a gate that will fall to and fasten quickly. Feed them till they come in freely; then place yourself in the tree, with a cord tied to the gate, by which means you can take them. They are sometimes taken with a toil, or net, into which they are driven with a reel made with long feathers, and a cord a hundred yards long; and sometimes a dog is used to drive them in. Where trees stand conveniently

across their main walks, tie two lines, one above the other, the height they run ; drive them in with a dog. When deer are forced, their horns lie straight with the neck, which will, when in, entangle them. If they are to be stalled, tie their legs, and saw their horns off just below the antlers ; blind them with sacking, and then take them to stall.

The best food for them is cut clover-hay and oil-cakes, ground and mixed. Common feed in the park is hay, beans, chestnuts, and drum-headed cabbages. When taken with the greens, (which you may know by their leaving the herd, and lying in wet grounds, when their teeth are generally loose,) give them dirty potatoes, grown in loamy clay, and clover hay. If they will not feed, cram them with barley-meal pellets ; and they must be housed. There should be vaults, made by the sides of hills, in parks, for deer to lodge in when the weather is very wet ; and feeding stalls in different parts. Vert, (which is all kinds of green wood in a forest,) with the beech-mast, makes the venison much finer flavoured than park feed ; though this may be much improved, by carrying them plenty of browse-wood. Stock may be three head per acre, if properly fed.

PHEASANT-SHOOTING.

PHEASANTS lie upon corn and stubbles, as long as any food is to be found, and in the neighbouring coverts or hedge-rows, where they may be seen morning and even-

ing at feeding time. They resort much to the sea-shore, when within a moderate distance, being fond of salt, and frequent marsh land, if there is proper cover for them. Such situations are peculiarly fitted for preserves, if there is a supply of wood within a moderate distance. Alder, willow, and other aquatics, in springy or marshy soils, is a good harbour for them. In winter they roost in the middle branches of the oak. Their food, in this season is hawthorn berries, insects, and reptiles, or they will even feed on carrion. The dogs for shooting pheasants in woods should be the purest bred and strongest formed spaniels, such as are not afraid of the thickest and most thorny covers. In extensive woodlands the team of spaniels cannot be too numerous or too full of tongue. Pheasants and red-legged partridges, which are two or three years old, will run till they may fairly be said to be coursed or hunted by the dogs, as if aware of the gun should they dare to spring.

As an important item in this sport, a few practical rules for breeding pheasants cannot find a better place than subjoined to those for their destruction.

71212 12312

BREEDING PHEASANTS.

LET your pheasantry be well constructed with perches, hiding-places made with reeds tied round stakes put up along the centre, and boxes round the sides. Your stock may be five or six hens to one cock; they will drop their eggs in various places: they must be gathered

every day, and put into wheat, small ends downwards, till you have got a sufficient quantity for a clutch or setting, which may be from seventeen to nineteen. If you want to send them any distance, they must be packed in wool. The silk hens are the best for incubation, the heat of the common hens being apt to shell-bake the birds in the eggs. When it so happens, put them into water rather more than lukewarm, which will relieve them; you will know when it takes place by the eggs moving. When hatched, their first feed should be the eggs of ants, fresh curds, and bread, with a small portion of chickweed, groundsel, or lettuce, cut fine: all these mixed carefully. It will be some days before they will eat grain; till then give them but very little water. Be sure to cover the train of your frame before the dew falls, and not to uncover it till it is quite off in the morning; such humidity being very hurtful. Remove your frame every other morning, first sweeping the dew off the grass where you intend to set it: here should be plenty of Dutch clover. Feed often, always beginning at daybreak. When they will eat grain freely, the other food may be gradually left off. After a month, you may let them have constant water, and plenty of cabbages. If the weather proves cold, give them white peas, or small tick beans. Let them always have plenty of sand laid in small heaps; this will rid them of vermin, and keep them clean. ~~They will have the pip, which is a scale on the end of the tongue: this being removed, apply garlic and tar mixed to the wound.~~ Next follow the snickups,

which is a sore upon the rump ; break it, and nip the virus out, and apply fresh butter. They must now be separated, each put into a box by itself ; for if they are left together, they will pick the sores and draw each other's entrails out. There must be something soft over their heads in the boxes, or by jumping they will hurt themselves : coarse sacking is proper. After they are well, it is better to turn them into the cover you intend them for, where should be hiding-places made for them, with stakes driven down lined with reeds or straw. Wheat sheaves are best, tied at the top and the tails spread open ; upon which they will hop, and pick the wheat out. These should be near their lodges, and well stored with different kinds of grain, plenty of buckwheat, white peas, and tick beans. Let plenty of white clover be sown in the pasture grounds which they frequent. When you go to feed them, always use a whistle, which they will come to freely. The same process will do for partridges, only you should have the Bantam or Spanish hens for sitting.

PARTRIDGE-SHOOTING.

NEVER follow coveys which will not lie, but rise on a slight alarm, and fly straight forward to a considerable distance ; but patiently wait their return, as they will generally, by a circular flight, return to the place from whence they were at first flushed. Some drive the fences and coverts with noisy spaniels. Leave no part

of the ground untried, as when coveys are separated and the birds frightened, and driven about, they may lie in places not at all suspected, and sometimes so close, as almost to be trodden upon.

When game is scarce, the sportsman must make extensive circles, and observe great silence and circumspection: some keep spaniels detached, sending them forward with a keeper, to hunt all the turnips and other likely haunts.

In throwing off young dogs, it may be necessary to give them the wind, which they will afterwards instinctively keep. Shooting-dogs should, as much as possible, be brought to attend to signals by the hand; and though under good command they may be allowed a pretty extensive range, yet all should be kept as much as possible within sight, and young ones ever within hearing.

The wounded partridge may be instantly killed by a slight knock on the back of the head against the gun-stock.

GROUSE-SHOOTING.

THE Scotch and Welsh mountains are the principal places for grouse-shooting. Red grouse are plentiful in the moor-lands of Derbyshire, Lancashire, Cumberland, and Yorkshire. They do not now come further than Staffordshire. A hardy and deep-flewed setter is far preferable to the pointer for grouse-shooting. Half a day

is quite long enough for the stoutest dog to be employed in this labour, at the end of which he should be relieved. In this way a brace or two of dogs may be fully employed, being kept in relay. The shooter should wear the lightest possible dress, over a flannel shirt and drawers, having his legs and feet well defended. Grouse can only be killed, at least in any numbers, in fine weather, and from about eight o'clock in the morning till you are weary. When the season is far advanced, grouse will only lie from ten or eleven till two, and the large shot and the largest piece you can carry are necessary. If two or more shooters are in company, one should make an extensive circle to head and stop them, another remaining behind to drive them, as the birds run hundreds of yards forward. The general method is to aim to kill the old cock, which is packling away in order to divert you from the pack, then the pack will lie still till you may almost kneel in on the head with your gun. To find main grouse, at the beginning of the season, take as many points as you can hunt steadily together. To kill the old cock found and marked down, take up all but the best dog. When grouse are wild, a perforated bag among them will sometimes cause them to drop very close. The bullet must be perforated with two holes intersecting each other in the centre. The whizzing of the ball in the air frightens the birds. Care must be taken to give sufficient elevation to the ball to prevent danger.

WOODCOCK-SHOOTING.

Woodcocks are generally to be found, in the greatest abundance, within a few miles of the sea-coast: though they traverse the whole country, their haunts are near springs and coverts, and where the upper staple of the soil is productive of worms. Their creeps, in the early part of the season, are in hedge-rows and clumps of trees, upon soft heather, among the cover, or on the margin of ponds, and in springy bottoms; afterwards in young wood, and in the skirts of woods. The only dogs for cock-shooting are setters, or good questing spaniels; and good noses are indispensably necessary, if the birds are not plenty. The cock is not easily flushed, but conceals itself under the stubs, or any cover; it is often very sluggish. It will often, when marked, be found to have run considerably wide, a circumstance which must be allowed for.

Woodcocks rise heavily, with a flapping of the wings, and in their flight skim leisurely along the ground, presenting a fair mark; when, if missed, they seldom fly far. But when flushed among tall trees, they rise with great velocity, and louder flapping of the wings; when they have risen so high as to be clear of the trees, they take their usual horizontal flight. This is the only difficult part of cock-shooting; much use and quickness being requisite to catch an aim through the branches of the trees. Markers are very useful in woodcock-shooting,

who may also beat the covers with poles ; and when the cocks have been flushed, by these or the dogs, they will land in some ditch, fence, or bank, at no great distance. Woodcocks inhabit the woods during the greater part of the winter season, but are invisible in severe and continued frosts, excepting the few which find cover near springs that never freeze. Woodcocks, when wounded, may be instantly killed by pricking them behind the pinion joint just under the wing : an act of charity no benevolent sportsman will delay.

SNIPES-SHOOTING.

SNIPES are distinguished as the common, the jack, and the great snipe : snipe-shooting is commonly performed without a dog, or with a well-seasoned pointer. In the winter season, snipes frequent low and moist ground, and shelter in rushy bottoms. In summer, they are found in hilly or moorland districts. When disturbed and flushed in breeding time, the cock snipe practises various manœuvres. He ascends to a vast height very rapidly, making a bleating noise. After poising himself awhile on his wings, he falls with equal rapidity, whistling and making a drumming noise, either by the flapping of his wings or with his voice. Snipe-shooting affords the greatest trial of the marksman's skill. In their walks, you may sometimes flush them nearly under your feet : then remain perfectly

179. 4

quiet till they have done twisting in their flight, as they may perhaps give you an opportunity of firing while describing the semicircle; but if you present in haste, you cannot bring the gun up to a proper aim. If they rise at a moderate distance, down with them before they begin their evolutions; when they cross, fire well forward. Snipes lie best in windy weather, and when flushed present a good mark by hanging against the wind. Endeavour to get to windward of them, and to catch a cross shot; thus you will not be so much embarrassed by their zigzag flight. Snipes are to be found in bottoms not frozen. First, go silently down wind, and beat up the wilder ones; then send an old pointer up wind, to find those which lie close.

WILD-FOWL SHOOTING.

THE birds most commonly sought are the duck and mallard, dun-birds, easterling, widgeon, and teal, with the coot, which (though held in no estimation, from its being so very plentiful) is, however, when stuffed and dressed like ducks, very little, if at all, inferior to them. Wild-fowl shooting is sometimes practised by night, during the utmost severity of the winter. Shots, even in the day-time, may be obtained by concealment and careful watching; but, in general, flight-time, or soon after twilight, is the season for this sport, which may be pursued from that time as long as the shooter can

hold out against the cold and fatigue. Warm clothing and double woollen stockings must be provided; and waterproof boots are indispensable; a fur or skin cap should be worn, as the wild-fowl are always alarmed at the sight of a hat. The gun must be of as great length and weight of metal as the gunner can manage. He who would shoot wild-fowl only a few hours after flight-time, must acquire the faculty of shooting by the ear, and this he will soon obtain by practice. He must direct his aim by the noise of their wings. The dog proper for the shore is the roughest and most hardy spaniel, whose business is to bring the fowl when shot; and who, on his return home, should be accommodated with a warm and dry lodging. A stake forked at top, sometimes called a bumper, should be provided: this is to be driven into the earth as a support from which to fire the long and heavy duck-gun: but it is much more pleasant, on shore, to fire with a barrel not exceeding four feet, and of considerable substance and bore, which a strong arm may easily manage; this, with Bristol patent shot, or better still, the patent wire cartridge, will kill at a distance of about from a hundred to a hundred and twenty yards. The beginning of a thaw, or a frost with snow and sleet, are the most favourable times for this diversion.

The shooter must fix on some place of concealment, and shift his standing as occasion may require. When a flat or punt is employed, he may pass along the creeks which divide the marshes, and by silence and

caution get within reach of the fowl in their feeding places. If the game is plentiful, several dogs should be employed, and a supply of guns provided ready loaded, besides a great gun, which may be fixed on a stancheon in the punt: great care must be taken not to overload the boat. In shooting wild-fowl, it is necessary to fire well before the birds, taking an aim two or three feet above them, being guided by practice and existing circumstances. Tubs are sometimes sunk in the earth by fowlers, or recesses dug in the sides of hills, from which to fire; but the best plan is for the proprietors of grounds frequented by wild-fowl, to run up a few sheds, where a swivel or two may be employed to advantage.

DOTTEREL-SHOOTING.

THE stories that have been propagated of this game being taken by the shooter stretching out an arm, or holding out a leg, which induces the birds to make a corresponding motion with their wings or legs, are founded only in fable. Naturally these birds are very shy, and fly off on any approach to them: but the sportsmen who are the most successful with them, spring the whole trip or covey purposely, once or twice, and then ride round them, which makes them all huddle together into a small compass. When thus induced to run together, the whole may be fired at, and ten or

twelve are often killed at a shot: firing at a single bird would be considered as a mere waste of powder. Epicures consider the dotterel as amongst the greatest dainties.

DOGS USED IN SHOOTING.

BREEDING, SELECTION, TRAINING, TREATMENT.

As dogs are the greatest acquisition to a sportsman, particular caution should be observed in breeding them. If *in and in*, they are liable to be stupid; if different kinds are crossed, such as setters and pointers, *cross upon cross*, &c., they are generally very ugly; therefore keep your breed unstained, severally by themselves. It is certain that dogs, or any other animals, are more fleet when bred from a young mother than from an old one. Let your bitches, all the time they are in whelp, see and enjoy game, as it will create a zest for it in the young ones. Keep all your puppies till they can run, and then you will see some come boldly up to you, and others skulk behind their dam, or to any obscure place: the bold ones are to be your choice. When the puppies are on the dams, give the bitches plenty of broth and boiled milk, which will the better enable them to bring the litters to maturity. When they are two months old, rub a small portion of tar upon their noses once a week; and about once a fortnight give them a small ball of sulphur and honey, mixed with flour.

In rearing, you may give them a few lessons. Begin with a piece of bullock's liver boiled, too large for them to gorge; throw it, and let them fetch it. If they will not take it freely, throw it at their mouths, which will make them fond of it. Let them enjoy it; and when they begin to break it, rub a small ball with it, and let them fetch that, or a cross. Have them on cords, about twenty yards long, and when they will not come to the call or whistle, draw them slowly to you. When they come, reward them with a bit of the liver. When they bring it freely, teach them to crouch to it, crying "Down charge!" drawing their fore-feet forward with yours, and bearing them down by the ear. Then teach them to hold up, chucking them under the chops till they rise and fall to the word. Great kindness must be shown at this tender age, as severity will damp their courage, and ruin them: never look morosely on them, nor show a greater partiality to one than another, as they are excellent physiognomists. When they begin to understand, and are strong enough to enter the field, let them chase larks, race and play; but if they will not run out, take a horse and ride a few miles every day with them, which will give them foot and courage. Then give them another trial, and if they run out well, let them chase, &c., till you find they will bear to be brought to by degrees: call and whistle, and reward them when they come; keep them at heel a little while, then set them off; let them keep out, and endeavour to make them quarter, by walking across, and pointing

with your hand. When they do it freely, teach them to crouch to the holding up of the hand, and to rise to the words "Hold up!" after which, when they come upon the haunt, and are likely to puzzle the birds up, by crying "Hold up!" they will throw their noses up, and find the birds out by their flying scent. When you see they have got the wind, by crying "To-ho!" they will stop: walk up, keep them to their point a little while, then flush the birds. If they chase do not chastise them, but take a piece of liver upon a cord, and drag it in a zigzag direction.

When the dogs are beating, fire a pistol, and make them crouch to it, by crying "Down charge." After reloading, cry "Hold up!" bring them up wind to the drag, lay them on the road, make them point it, and draw steadily till they find it, then reward them with a bit of it. Practise this for some time, then procure a live bird, tie a string to its leg forty yards long, make a hole in the ground, put the bird into it, and cover it with a tile. Stake the end of the string and let the dogs find the bird. When they are pointing it, draw the tile; and when the bird takes wing, fire your pistol, make the dogs crouch down to it, then cry "Hold up! hey! lost!" and let them find it. Be up with them, and cry "Dead! dead!" to prevent their killing it—then give them a reward, which, at the word "dead," makes them drop the game from their mouths. This will prevent their breaking their game. Next procure a rabbit, fasten a cord round its neck, and proceed as

before. When they point it, fasten their cords to prevent their chasing, as the rabbit, when it gets to the end of the cord, will bolt about in different directions.

In teaching your dogs to back, cry "To-ho!" and point to the dog that is standing. If they do not take it that way, take a dog by the ear, direct his head to the dog that is pointing, and with your other hand stretch his stern out, in which pointing attitude make him remain for some time: this mode will soon bring him to it. If a dog dash in, always go up and stake his cord, letting him have a sharp check collar on. When they break field, or hang on the haunt, hide yourself; and when they return, by missing you, they will feel alarmed at being lost, which will make them fearful of breaking away again. You must not let them hunt for you long, lest they take fright, when they will throw their heads up, cling their tails in close between their gaskins, and set off full run; at which time calling is of no use, therefore you will be very liable to lose them. When a dog takes to watching and following, change his companion; put him with a slower dog. Throw them off right and left, making them cross each other independently. If he continues to follow and watch, hunt him single-handed till he finds his own game freely, by which means he will get the zest, and become more anxious and independent. If a dog blinks, you must encourage him as much as you can. Take him on a cord, and lead him up; give him a reward often. If he blinks the gun, rub the reward on it, and let him smell

it, with a bird tied to the butt. If he runs home, appoint somebody to give him a good flogging on his arrival, and put him to bed without his supper. Next morning take him out hungry ; carry plenty of liver or cold meat in your pocket to give him when he behaves well. This will bring him to, if repeated. Never let any one feed your tender-tempered dogs but yourself. If a dog comes to heel, and remain there, pass your whip smartly behind you, as if undesignedly, at the same time whistling, and crying, " Hey ! off ! " &c.

Every one accustomed to the breaking of young dogs and colts, will have observed that they will for a time take their lessons readily, with great docility and apparent steadiness ; and when you begin to think they may be depended on, they will on a sudden become captious, weary of their trouble and restraint, turn sullen, pretend to have forgotten all they had learned, and put in practice all kinds of rebellious tricks, in order to liberate themselves. They will refuse to follow, or when thrown off, will idle and skulk or hunt listlessly, turning their heads as if watching an opportunity to escape, and may at last perhaps run entirely off. This must be remedied by a continued use of the collar and line, with a strict treatment ; but do not use too much severity, so that in the end the labour may be rendered both familiar and pleasant. After this contest for the mastership, you may depend upon their general good behaviour. Too long training without a gun is dangerous, as they are liable to lose the zest. Never

suffer dogs to go self-hunting, as they will contract ill habits: you may teach them twenty new tricks before you can break them of one old one, their memories being so very retentive. When you go among a number of them treat them impartially; rub all their ears and crops, and pet them equally alike; for if a dog finds himself neglected or unnoticed, you will see him turn melancholy, and go to his bed.

SELECTION.

IN choosing a pointer or setter, let his muzzle be open, flew-jawed, rather short: let him have full hazel eyes, called hare's eyes, his poll rising to a point, his ears long and falling down between the neck and jaw bone, which is called being well hung. The neck and head should be set on straight, so that when he points, his nose turns up rather above the horizontal line. Let his shoulders be deep, and well let down; his elbows well in. He should have straight and large legs; small feet, a little pointed, standing true, and the balls small and open: narrow withers, back a little hooped, broad loins, deep in the fillets and gaskins, short from the hock to the pastern-joint, flat sides, fine floating veins, straight croup, stern set on high and straight, being very fine; if a setter, with a deep feather.

Ill-bred dogs you may know by their being fox-muzzled, small-eyed, bat-eared, fan-eared, short-necked, having the head set on like a pickaxe, broad withers,

round shoulders, elbows out ; small legs, feet out, called cat-footed ; thick balls, round barrel, round croup ; clumsy stern, set on low ; sickle-hams, &c. The best cross is a handsome high-mettled fox-hound for a sire, and an over-stanch pointer-bitch for a dam ; then you will have plenty of foot and courage, and no false point.

When you have chosen a dog agreeable to the description already given, take him into the fields and see if he be a gallant beater, ranging high, running within himself, not over-reaching nor clambering, his nose up and turned to the wind, endeavouring to catch the flying scent ; making his casts, twists, and offers gallantly ; not hanging on the haunt, nor puzzling for the ground scent. He must quarter his ground regularly, and independent of his partner ; not missing the corners of the fields. He must neither skulk, skirt, break field, follow, watch, blink, hug, labour, nor point at sight, nor be hard-nosed, or near-scented ; but wind his game at long distances, keep his points fast, back the same without jealousy, crouch to dog, bird, and gun, to the signal of the hand, and the words “ To-ho ! ” without being captious or capricious. The latter means his standing, when you call, and neglecting to come. If you see him chap his point, it is an excellent symptom ; if he mouthe and hug his game, it discovers the real zest. If a dog has not been well trained when he comes upon the haunt, you will see him flourish, twist, dash, jump, run at shot, &c., which are the effects of high courage, and are to be remedied by practice.

Spaniels should be flew-jawed, well hung, open-muzzled, rather long in the neck, with great liberty in the back ; very short thick legs, a little bandy and well feathered down and through the balls ; thick coat and skin, good temper, high courage, and be good stickers ; which you may know by trying them in cold rainy weather, when, if they will rough well, not coming to heel, nor sitting on the roots of trees, licking and picking themselves, making beds, &c., you may depend upon their being right in the breed. Next observe, if they quest and road their game steadily, knowing the toe from the heel, opening as the scent strengthens ; not jumping, dashing, or flourishing over the road, by which means they lose their hit, beat counter, and hang babbling on the haunt ; when, if another dog own at a distance, they are apt to stand at bay, instead of packing. The principal thing to be observed in managing them, is to keep them from running outside, making them hunt at hand, and down to charge ; prevent their following, by throwing them off right and left ; babbling and standing at bay, by running up, and flogging or driving them off ; prevent their chasing hares and rabbits, by the words “ Ware Flix ! ”

Never chastise a dog *after* he has committed a fault, but as nearly *in* the act as possible. When you punish, have him upon a training cord ; do not loose him till he has become reconciled ; if you do, he will very likely skulk ; therefore coil your cord upon your hand, and keep him at heel some time, then give him liberty upon

the cord by degrees. If you discover any symptoms of skulking, stake the cord, and leave him behind a field or two ; then return, and if he seems cheerful, give him a reward. Let him off upon the cord, and when he beats freely, you may venture to remove it altogether. If a dog is callous to the whip, with a slip cord hold him up with your hand till he is alarmed. You may use the whip at the same time.

Some dogs are so very tender in their tempers, that they will not bear any punishment from the hand : these you must let punish themselves, by check collars and cross-puzzles. Not knowing from whence the punishment comes, they are not offended with you. These are for pointers and setters : for spaniels use loaded collars, &c.

For hare and rabbit-shooting use the short-legged wire-haired beagles ; they are flew-jawed, heavy hung, and deep mouthed : if well managed they will never leave trail, till their game is either dead, or run to ground. When you want to call away, endeavour to cross the trail and take them up, as rating will cause them to change and leave trail when a hare breaks cover ; which they should not do, but run the ring, and bring her back. Always take them to and from cover in couples, to prevent their breaking away.

TRAINING.

TO BREAK THE SPANIEL.

A MATERIAL duty of shooting-dogs or spaniels is to seek and bring in the dead or wounded game. To prevent their breaking feather, or mangling the birds, pains must be taken, and they may with care be made sufficiently tender-mouthed. They should be so well disciplined as for only one at a time to obey the order to fetch game. Pointers may be taught to perform this office as well as spaniels. Dogs may be brought into the field at from eight to nine months old, previous to which they should be taught to follow and hunt such game as they can find, which will be all sorts of wild birds ; and their first lesson should be to come in when called, which, well impressed on their memories, will be useful ever after. They should next be taught not to pursue sheep, domestic poultry, or other improper objects ; and the sooner these lessons, with that of fetching and carrying, are taught to the puppy, the better.

TO BREAK THE POINTER.

THE success of this depends much on the true breeding of the dog, but still more on the unwearied patience of the breaker, as that single virtue is worth all the so-called secrets of professed breakers put together.

The pointer puppy being accustomed to follow, and to observe the word with tolerable obedience while abroad, may be taken to some convenient and quiet place, in his check collar, and there pegged down to a string about twenty yards long. The breaker must take with him his whip and some eatable of which the puppy is fond, as it is by reward and punishment that the animal must be taught; but the former must be chiefly confined to the caresses and kindness of the master. He is now to be taught to comprehend and obey the phrases, on his understanding of which all practice depends: as, "Take heed!" "Down!" to stop or crouch down, "Down charge!" "Back!" "Come here!" "Dead!" "Hey on!" "Go seek!" or "Hold up!" when he is nosing the ground too close in the field, like the spaniel or hound. "'Ware!" should be applied to every object against which the dog is cautioned; as "'Ware hare!" "'Ware horse!" "'Ware bird!" and to these must be added other necessary phrases. They must not, however, be too numerous, and all the lessons should be extremely plain and distinct, suitable to the animal's comprehension. Most of these lessons may be given with the dog thus in hand, the remainder must be reserved for the field. Stripes are necessary, in the first instance, to direct him as to the positions or motions required. These being understood, the breaker has only to stand and give the word distinctly, in a caressing tone, for every separate act. Encouragement, and sometimes reward, should follow punctual performance; whilst rating or

punishment should warn the pupil of the consequences of disobedience. He should at first be threatened by the mere crack of the whip, and if its real use become necessary, it must at first be inflicted very sparingly. If the dog become torpid and sulky from affright, which will often happen, or appear determinedly obstinate, instead of severe whipping and harsh treatment, the best method is to stay proceedings awhile.

The dog being compelled to crouch down, the breaker should stand over him, whip in hand, looking steadfastly, with his eyes fixed on those of his pupil, and showing a determination to be obeyed, which he will well understand. This may be continued for ten or fifteen minutes, when the dog should be approached with kindness, and a new attempt made to enforce obedience. During training, the pointer puppy must be inured to the report of the gun and the smell of powder. The sweet and peculiar smell of game should also be rendered familiar to him; while, by using him to dead game, he may be made tender-mouthed to the birds he afterwards picks up or carries. His drillings should be continued once a day during two or three weeks, but should never be too long at one time, as this only serves to fatigue and discourage the puppy. In the interim he should have daily pleasing excursions in the field, and the example of stanch old dogs should be frequently exhibited. The young dog must be taught to obey the whistle as well as the voice.

Two or three, in check, may be pegged down one

pigeons being on the wing. In the fields you may hear the drag-net brush over the stubbles, and the hares cry when taken by gate-nets or wires. When you think a particular field (where one or two large coveys jug) will be drawn, put three or four old sickles into long handles, and stick them upon the tops of the stetches, edges reversed; these, if they carry the tail of the net, will divide it, but they must be very sharp. Unsuspected plashes, made in the rides and glades in covers, will catch the prints of the poachers' feet, by which you will often be enabled to make them out. Sometimes, when they look very fresh, you may, by walking counter, come upon them.

The best outside covering for a keeper to go out with at night, is an ass-skin dressed, with holes for the arms and loops in front. In this, with an invulnerable cap, covered with the same, he may lie down anywhere, without being suspected.

To find wires in cover, observe upon which side the haunt for feeding lies; on that side crosswise they are planted: get in some five or six rods, and about the same distance into young slop from the wall, and where you have found one by the break or moss, you may perhaps follow the rest. If there should be no break, get two wires in a line, take an object on the other side of the cover, to which walk, looking sharp right and left, and you will be sure to find them, particularly if there are hares in them, as they will be so much easier seen.

Hay-nets, and other cumbersome apparatus for the

destruction of hares, have, with the largest parties of poachers, given way to the simple provision of one or at most two purse-nets, of very fine materials. The chief trouble is in stopping and reducing the creeps, which in the more advanced parts of the seasons, is much abbreviated by the expedient of a large slice of turnip dropped near each, equally efficacious also on the principle of a scarecrow.

Pheasants are also taken in creeps, near their feeding places by a single wire, and on the same principle as hares, before described.

Partridges, after their roosting places have been ascertained, are captured simply by means of a horse-hair noose, fixed to a small stake in the ground. Several of these are laid in the traverses, about a yard asunder ; on being entangled, the birds strive incessantly to come at each other, thus keeping the noose to its utmost stretch, till they become quite exhausted and incapable of further struggling.

Deer are taken by putting a wisp of hay at the root of a tree, between two stubs ; and fixing a hoisting halter before it. When he pulls the hay it will take him. Or hang two apples upon the body of a tree, high enough to make him reach up ; and a sharp hook being driven in just under them, it will catch him under the jaws on his slipping down. The poacher then lies in ambush, from whence he runs and cuts the deer's throat. They take fawns, by paring their feet when first dropt ; this will keep them at lodge, where they

will grow fat, and be easily taken by two people surrounding them with a net ; or by means of a dog, with which many are coursed and taken in moonlight nights^a.

PRESERVATION OF FISH.

FISH are taken in various ways ; by a drag and flews, during the night. Instead of plunging, poachers lash bricks to a cord, and draw them to and from each other, across the river or pond. To prevent this, put some old sickles, scythes, or swords, into large lumps of wood, and drop them in zig-zag directions along the river or pond ; likewise stumps, with nails driven down into the bottom. To find luggers, trimmers, sunk baits, eel-pots, eel-lines, starkers, &c., walk on the sides of the waters, with a pole and a strong cord, having a drag or creeper on it : this, properly used, will find them ; it must be thrown in different directions, late in the evenings.

Pord-netters are a class of poachers not generally known. What is called the pord-net consists of two staves shod with iron, to which is fastened a net. In quick running stony waters it is used with great effect. The poachers wade a shallow stream, drive the trout to their *holds*, and placing the staves so as to bring the net round a stone or hold of any kind, they are said to *pord*,

^a Like St. Augustin's Confessions, these aphorisms seem of very questionable service. Peter Pindar's ostler never tried the effect of greasing the teeth of his customer's horses, till put up to the stratagem by his ghostly adviser.—EDITOR.

prod, or *poke* the points underneath, till they are forced to come out and strike into the net. Carp are driven into their hordes, under the sides, where, with a semicircular net, they are taken, by puddling them till they fly into it. Some have been taken (after first being collected into one place, by feeding with new grains and blood), by intoxicating them with crummy bread squeezed on a stone, impregnated with *coccus indicus*, and oil of asp. They will come up, and you may take them with a landing-net, but a casting-net is much better. In June, carp and tench are very busy "roding," when you may feed them into the shallow waters, and take them with a casting-net, and stock your stews for the year. Always let the net lie till the fish rise, as carp strike into the mud, if there is any, but cannot remain there long, as it makes them sick. When you drag a pond, have two drags, one about three yards behind the other, as the fish will strike the mud, and let the lead-line slip over them, when, thinking they are safe, they precipitate themselves into the other net. For tench, you may let flews stand with a brass candlestick on each side, a yard distant, on a float: they will fly from one to another.

To keep trout alive, whilst carrying them a long distance, mix one ounce of white sugar-candy, a piece of saltpetre the size of a walnut, and a table-spoonful of flour together; this is sufficient for a pailful of water, which must be hard spring water: this proportion, often repeated, will keep them alive. Carp and tench will travel in clean whole wheat-straw many miles, if laid in layers, as the straw retains the air for them to suck.

DECOYS FOR DUCKS.

THE contrivances called decoys are generally confined to the fenny countries. They are large ponds, dug in the fens, with four or five creeks, running from them to a great length, and each growing gradually narrower till it comes to a point. The banks are well planted with willows, sallows, osiers, and similar kinds of underwood. Into these ponds the fowls are enticed by ducks bred up tame for the purpose; (for the decoy-ducks, being fed constantly at certain places, become at length so familiar as to feed out of the hand;) and, as they are not confined, they fly abroad and return at pleasure. During the proper season of the year they take frequent flights, and sometimes, after being gone several weeks, return home with numerous flocks of fowl. As soon as the decoy-man perceives the flocks settled in the pond, he goes down secretly to the angles of it, under cover of hedges made with reeds, and then throws a quantity of corn into such shallow places as the decoy ducks are accustomed to, to which they immediately resort, followed by the strangers. Thus they are every day entertained without any disturbance, the bait being sometimes thrown into one place and sometimes into another, till they are insensibly led into the narrow canals of the pond, where the trees on each side hang over-head like an arbour, though at a considerable height from the water. Here the boughs are conducted with such art,

prod, or *poke* the points underneath, till they are forced to come out and strike into the net. Carp are driven into their hordes, under the sides, where, with a semicircular net, they are taken, by puddling them till they fly into it. Some have been taken (after first being collected into one place, by feeding with new grains and blood), by intoxicating them with crummy bread squeezed on a stone, impregnated with *coccus indicus*, and oil of asp. They will come up, and you may take them with a landing-net, but a casting-net is much better. In June, carp and tench are very busy "roding," when you may feed them into the shallow waters, and take them with a casting-net, and stock your stews for the year. Always let the net lie till the fish rise, as carp strike into the mud, if there is any, but cannot remain there long, as it makes them sick. When you drag a pond, have two drags, one about three yards behind the other, as the fish will strike the mud, and let the lead-line slip over them, when, thinking they are safe, they precipitate themselves into the other net. For tench, you may let flews stand with a brass candlestick on each side, a yard distant, on a float: they will fly from one to another.

To keep trout alive, whilst carrying them a long distance, mix one ounce of white sugar-candy, a piece of saltpetre the size of a walnut, and a table-spoonful of flour together; this is sufficient for a pailful of water, which must be hard spring water: this proportion, often repeated, will keep them alive. Carp and tench will travel in clean whole wheat-straw many miles, if laid in layers, as the straw retains the air for them to suck.

DECOYS FOR DUCKS.

THE contrivances called decoys are generally confined to the fenny countries. They are large ponds, dug in the fens, with four or five creeks, running from them to a great length, and each growing gradually narrower till it comes to a point. The banks are well planted with willows, sallows, osiers, and similar kinds of underwood. Into these ponds the fowls are enticed by ducks bred up tame for the purpose; (for the decoy-ducks, being fed constantly at certain places, become at length so familiar as to feed out of the hand;) and, as they are not confined, they fly abroad and return at pleasure. During the proper season of the year they take frequent flights, and sometimes, after being gone several weeks, return home with numerous flocks of fowl. As soon as the decoy-man perceives the flocks settled in the pond, he goes down secretly to the angles of it, under cover of hedges made with reeds, and then throws a quantity of corn into such shallow places as the decoy ducks are accustomed to, to which they immediately resort, followed by the strangers. Thus they are every day entertained without any disturbance, the bait being sometimes thrown into one place and sometimes into another, till they are insensibly led into the narrow canals of the pond, where the trees on each side hang over-head like an harbour, though at a considerable height from the water. Here the boughs are conducted with such art,

when they have young ones, will feed them well, which a cropper, in consequence of the largeness of his crop, seldom will.

Carriers breed but slowly, having rarely more than three or four pair a-year; they are constant lovers, and very seldom tread any but their own mate, and are therefore hard to match when separated.

On the contrary, a powder may be taken from his own mate, and he will match to another in a day or two, so that bastard-bred pigeons are most serviceable for those who breed them to supply the table.

Great care must be taken to make convenient places to breed in; each pair of pigeons must have two nests; those with baskets in them are best; for before one pair can go out of the nest, or feed themselves, the old ones will lay and be sitting; I have often, indeed, seen a second pair hatched before the first could feed themselves, and the old ones feed both pairs. Be sure, when you take the young ones, to clean the nest, or put in a clean basket, for cleanliness is of great service to pigeons.

Never let them want food, for if you do, they cannot be provided with soft meat in their crop when the young are hatched, without which, they will certainly die; or if you feed the old ones by hand, they will go and feed their young immediately with what they get, which, being too strong for their powers of digestion, kills them. The best way is to let them have food always by them in a box, with a hopper in it.

Breed young ones for stock in the spring ; those bred in the winter, being generally cramped, never prove good breeders.

The reason I recommend baskets to breed in is, tame pigeons seldom build their nests, the want of which a basket supplies. Be sure to take care that no vermin come among them.

Of those bred in pigeon-houses, the grey pigeon, inclining to ash-colour and black, is the best ; the female generally shows her fruitfulness by the redness of her eyes and feet, and by a ring of gold colour round her neck.

There are two seasons in the year in which you may stock your pigeon-house. The first is in May ; as these first pigeons, having strengthened themselves during the winter, are in a condition soon to yield profit to the buyer. The second is in August ; for at that time there are a great number of young pigeons that have been well fed with the corn which their dams have plentifully supplied them with, from the harvest.

You must take care to furnish your pigeon-house according to the size of it : if you put but few in, a long time will elapse before you will have young pigeons for use, for you must take none out of it before it is well stocked.

Be sure to feed in hard weather ; and in benting time, which is when the corn is in the ear. Keep out the vermin, and you will never want stock.

Give loam, mixed well with salt and cummin-

seed, made up in lumps and dried ; which materially assist them in breeding.

Never let them want fresh water. The best food is tares : the mornings and evenings are proper times to give them their food, but never at noon, for fear of breaking their rest, which they usually take at that hour : roost is very necessary with the food they eat, to make them thrive.

Pigeons will live eight years, but they are only prolific for the first four, afterwards they are worth nothing : when once past that age, they deprive you of the profit you might reap by others that are younger.

If you wish to furnish your table with young ones in the winter, you must not wait for them till they can fly, but take them when they are grown rather strong, and pluck the largest quills out of their wings, which will confine them to their nests ; or tie their feet, by which means they will be fat in a very short time.

DESCRIPTION OF THE VARIOUS SORTS OF PIGEONS.

I. Runts, the largest kind of pigeons, called by the Italians *tronfo*, may be divided into greater or smaller : those which are commonly called the Spanish runts are much esteemed, being the largest sort of pigeon, but they are sluggish, and more slow of flight than the smaller sort of runts ; while the smaller are not only better breeders, but quicker of flight, which makes

them much fancied. The colours of their feathers are uncertain.

II. The next which make the largest figure, but are not in reality the largest birds, are the croppers; so called because, by attracting the air, they usually blow up their crops to an extraordinary size, so as to be sometimes as large as their bodies. This sort is valued in proportion to the facility with which it can swell up its crop. Their bodies are about the size of the smaller runt, but more slender; their feathers are also of various colours.

III. The shakers are of two sorts, viz. the broad-tailed, and the narrow-tailed: these are so called, because they are almost constantly wagging their heads and necks up and down. The broad-tailed are distinguished by the tail feathers, about twenty-six in number; the narrow-tailed have not so many.

These, when they walk, carry their tail-feathers and crest spread like a turkey-cock; they have likewise a diversity of feathers.

IV. The jacobins, or cappers, so called on account of certain feathers which turn up about the back part of the head. Some of this sort are rough-footed: they are short billed; the iris of the eye is of a pearl colour, and the head is commonly white.

V. The turbit, which some suppose to be a corruption of the word cortbeck, or kortbek, as they are called by the Dutch, which seems to be derived from the French, court-bec, and signifies a short bill, for which

this pigeon is remarkable ; the head is flat, and the feathers on the breast spread both ways. The turbits are about the same size as the jacobins.

VI. The carriers are pigeons so called from the use which is sometime made of them in carrying letters to and fro ^a. Certain it is that they are very nimble messengers, for some authors affirm it has been found by experience, that one of these pigeons will fly three miles in a minute, or from St. Alban's to London in seven minutes : this, it is said, has been tried.

We have an account of the passing and repassing with advices between Hirtius and Brutus, at the siege of Modena, who had, by laying grain for them in some high situations, used their pigeons to fly from place to place for their food, having before kept them hungry, and in the dark.

A coachman, who drove one of the Colchester coaches, frequently brought one down with him, and turned it off in the town of Colchester, whence it would fly back to London in a very short time.

These pigeons are about the size of common pigeons, and of a dark blue or blackish colour, which is one way of distinguishing them from other sorts : they are also remarkable for having their eyes compassed about with a broad circle of naked spongy skin, and the upper chap of their beak covered more than half from the head with

^a The expression is a faulty one. Weight would be fatal to its flight ; the carrier-pigeon is not capable of transporting that which is generally understood by the term "letter."—EDITOR.

a double crust of the like naked fungous substance. The bill or beak is moderately long, and black.

These birds, though they are carried many miles from the place where they are bred or brought up, or have themselves hatched or bred up any young ones, will immediately return home as soon as they are let fly.

When persons wish to use them for carriers, they should order them after the following manner: Two friends should agree to keep them, one at London and the other at Windsor, or at any other places. He who lives at Windsor must take two or three cocks or hens which were bred at his friend's, at London: and the other, two or three that were bred at Windsor. When the person in London has occasion to send any advice to his friend at Windsor, he must roll up a little piece of paper, and tie it gently with a small piece of string about the pigeon's neck.

But here you ought to remember, that the pigeons you design to send with letters, must be kept much in the dark, and without meat for eight or ten hours previous to their being turned out; and then they will rise and turn round till they have found their way, and continue their flight till they reach home.

With two or three of these pigeons on each side, a correspondence might be carried on in a very expeditious manner.

VII. The Barbary pigeon, or barb, is another sort, whose bill is, like that of the turbit, short and thick, having a broad and naked circle, of a spongy white sub-

stance, round the eye, like that of the carrier. The iris of the eye is white, if the feathers of the pinions incline to a darker colour ; but red, when the feathers are white, as in other birds.

VIII. Smiters are pigeons supposed to be the same that the Dutch call draayer. This sort shake their wings as they fly, and rise generally in a circular manner : the males, for the most part, rising higher than the females, and frequently falling and flapping them with their wings, making a noise which may be heard a great way off, caused by an evolution often the means of breaking or shattering their quill feathers.

These very much resemble the tumbler pigeon : the difference being chiefly this,—that the tumbler is somewhat smaller, and in its flight will tumble itself backward over its head : the diversity of colours in the feathers is of no consequence.

IX. The helmet pigeon is distinguished from the others, because it has the head, the quill-feathers, and the tail-feathers, always of one colour, either black, white, red, blue, or yellow ; while the other feathers of the body are of a different colour.

X. The light-horseman. This is supposed to be a cross strain, between a cock cropper and a hen of the carrier breed, because they seem to partake of both, as appears from the excrescence of flesh upon their bills, and the swelling of their crops. These are not inclined to leave the place of their birth, or the house that they have been used to.

XI. The bastard-bill pigeons are something larger than the Barbary pigeon: they have short bills, and are generally said to have red eyes, though probably eyes of that colour belong only to such as have white feathers.

XII. There is a pigeon called the turner, said to have a tuft of feathers hanging backwards on the head, which, an author asserts, parts like a horse's mane.

XIII. There is also a pigeon of a smaller sort, called the finikin, but in other respects like the former.

XIV. There is another pigeon called the spot, supposed to take its name from a spot on the forehead, just above the bill; the feathers of its tail are always of the same colour with the spots, while all the other feathers are white.

XV. The mahomet, or mawmet pigeon, supposed to be brought from Turkey, is singular for its large black eyes; but the other parts are like those of the Barbary pigeon.

The manner of distinguishing the males and females among pigeons, is chiefly by the voice and cooing; the females have a small weak voice, and the males a loud and deep one: they are also distinguished by their size.

The food which is generally given to pigeons is tares, but if spurry seeds were mixed with them, or buckwheat, those grains would forward their breeding; however, with only tares they may be expected to breed eight or nine times a year, and then they seldom hatch above one at a time; but if they be in full vigour, they will breed a pair at one sitting.

In the feeding of pigeons that have no young ones,

it is advisable not to let them have more food at one time than they can eat, because they are apt to toss it about and lose a great deal of it. They must not be without water, being of themselves dry birds, and subject to contract dirt and fleas. The dove-cote should be carefully cleaned once a week, if not more frequently.

PART THE FOURTH.

VARIOUS WAYS OF TAKING PHEASANTS.

PHEASANTS are taken with nets, in crowing-time, which is about the end of February, and in March, before they begin to breed. It is done either generally or particularly; the first is, when the whole eye, viz., the old cock and hen, with all their young ones, or pouts, as they flock or run together in thick woods or coppices, are taken; or particularly, when none are taken but the old, and such of the young as are of an age fit for coupling; so that you cannot have any assurance with your nets to strike at more than one or two at a time; for pheasants are of a melancholy or sullen disposition, and when once they have coupled, do not associate in flocks, like other birds.

In order to take pheasants with ease, you must be acquainted with their haunts and usual breeding-places, which are in young, thick, and well grown coppices, free from the annoyance of cattle or pathways; for being of a very timid nature, they do not abide or

breed in open or plain fields, nor under the covert of corn fields, or low shrubby bushes.

Having found their haunts, next you are to find their eye or brood ; and here you are to observe, that pheasants come out of the woods and coverts three times a day, to feed in fresh pastures, green wheat or other grain, about sunrise, at noon, and a little before sunset. The course to be followed is, to go to that side of the wood where you suppose they make their sallies, and watch the places where they come out ; or to search their haunts ; for you may see the young pouts in that season flock and run together after the hen, like chickens. Again, if you go to their haunts early in the morning or late in the evening, you will hear the old cock and hen call their young ones, and the young ones answer them, and accordingly direct your path as near as you can to the place where they are, then lie down as close as possible, that you may not be discerned ; observe how they lodge together, the better to know how to pitch your nets with advantage, at once of wind, weather, and place ; and take care that all be done as silently as possible, otherwise they will betake themselves to their legs, and not to their wings, unless forced to it by a close pursuit.

But the most certain way to find them is, to have an artificial pheasant-call, wherein a person should be very expert in the imitation of their notes, and the time when, and to what purpose they use them ; their calls are much the same as those used by hens in clucking their chickens.

The chief period for using the call is in the morning early, or about sunset, at which time they seek their food, and then the note must be to call them to feed ; but though these are the best occasions, yet it may be used at other times, only altering the notes for calling them together.

Having the perfect use of the call, the knowledge of their haunts, and the time to take them, choose some private place in which you may not be discovered, and then call at first very softly, lest any should be lodged very near you, and be frightened at your loud note ; but if nothing replies, then raise your note higher and higher till it be extended to the utmost compass, and if any be within hearing, they will answer in as loud a note as yours, provided it be tuneable, or else all will be spoiled.

As soon as the pheasant answers, if it be at a good distance, creep nearer and nearer, still calling, but not so loudly : as you advance nearer, so will the pheasant to you, so that you will come in sight of it, either on the ground or at perch, always imitating it in the true note. Then cease calling, and spread your net between the pheasant and yourself, in the most convenient place you can find, making one end fast to the ground, and holding the other in your hand by a long line, so that when any thing strains it, you may pull the net close together. This done, call again, and as soon as you perceive the pheasant come under your net, rise up and show yourself, upon which, being frightened, she will spring, and so become entangled in it.

In case many pheasants answer the call, and from several parts of the wood, keep your first station, and as you hear them make towards you, get your nets ready. Spread them conveniently about you, viz. one pair on one side and another on the other, lying close, without any noise, only that of your call, till you have allured them under your nets, and then stand up to frighten them as before directed, that they may be entangled.

Another way to take pheasants, which is considered better than the former, is, to be provided with a live cock, (tied down to your net,) who, by his crowing, will draw others in. You must lie concealed in some bush or secret place, and when you see any pheasant come to your net, then draw your line, and the net will fall on it and take it.

To take pheasants by snares.—When you have found their passage out of the wood to their usual places of feeding, there plant a little stake, with a couple of snares of horse-hair, one to lie flat on the ground for their feet, and the other about the height of their head, to take them by the neck; and in case there should be more passes than one, do the like to every one of them. Then take a circle, and when you are in a direct line with the pheasants and the snare that you have fitted, make a gentle noise to frighten them. They are also taken by wires in the creeps and rides in covers, and in wheat, where they are bred at harvest time, and near their perching trees in cover.

If, by their dunging and scraping, you perceive that they frequent any place, you may then make use of such hedgerows as are directed to take fowl with lines and birdlime; only plant your running lines from them, of a convenient height, and still place one to lie flat to entangle their legs.

RESORTS OF PARTRIDGES.

PARTRIDGES, being naturally cowardly, fearful, simple birds, are easily deceived or beguiled with any device whatever, by train-bait, engine, call, stale, or other enticements.

The places they delight in most are corn-fields, especially while the corn grows, for under that cover they shelter themselves and breed. Neither are those places unfrequented by them when the corn is cut down, in consequence of the grain they find, especially wheat stubbles, the height of which they delight in, as it serves to shelter them. When the wheat-stubble is much trodden, they betake themselves to the barley-stubble, provided it be fresh and untrodden; and they will hide both themselves and coveys in the furrows, amongst the clods, brambles, and long grass.

After the winter season is come, and the stubble-fields are ploughed up, then they resort to the upland meadows, and lodge in the dead grass, or under hedges, amongst mole-hills, or under the roots of trees. Some-

times they resort to coppices and underwoods, especially if any corn fields are near, or where broom, brakes, fern, &c., grow.

In harvest time, when every field is full of men and cattle, in the day-time you will find them in the fallow fields which are next adjoining to the corn-fields, where they lie lurking till evening, and then they feed among the sheaves of corn ; as also early in the morning.

When you know their haunts, according to the situation of the country and season of the year, your next care must be to find them there, which is done several ways. Some do it by the eye only ; and this can never be taught. By long experience alone, is the art learned of distinguishing the colour of the birds from that of the earth, but every facility for the study is afforded. They are so lazy and so unwilling to take wing, that you may almost set your foot upon them before they will stir, provided you do not stand and gaze on them, but continue in motion, otherwise they will spring up and be gone.

Another way to discover them, is by going to their haunts very early in the morning, or at the close of the evening, which is called the jucking-time, and there listening for the calling of the cock partridge, which is very loud and earnest ; after some few calls the hen will answer. By these means they meet together, which you may know by their chattering one with another : upon hearing which take your range about them, draw-

ing nearer and nearer to the place you heard them juck in ; then cast your eye towards the furrows of the land, and there you will soon find where the covey lies.

The best, surest, and easiest way for finding partridges, is by the call, having first learned their true and natural notes, knowing how to tune every note to its proper key, and applying them to their due times and seasons.

Being perfect herein, either mornings or evenings, (all other times being improper,) go to their haunts, and having concealed yourself in some secret place where you may see and not be seen, listen awhile if you can hear the birds call ; if you do, answer them again in the same notes ; and as they change or double their notes, so must you in like manner : thus continue till they draw nearer and nearer to you. Having them in your view, lay yourself on your back and lie without motion, by which means you may count their whole number.

VARIOUS WAYS OF TAKING PARTRIDGES.

AMONG the many stratagems resorted to for taking partridges, a singular method has been adopted by some poachers, viz., to provide a setting-dog, upon the head of which they fix a lantern, for the purpose of his ranging the field in the night : on his stopping, the poachers know where the partridges lie, and draw the

net up to him accordingly. The gamekeepers of the Earl of Carlisle, being on their nightly perambulations, were not a little astonished and alarmed, at seeing a light traversing a field in a very singular manner; they prepared their guns accordingly, and in a short time the light made a sudden stop, when three or four men, whom they had not descried, making their appearance, they were secured in the act of drawing a large net up to the light, upon the head of the setter, as before mentioned.

The nets for taking of partridges must be every way like pheasant nets, both for length and breadth, except that the meshes must be smaller, being made of the same thread, and dyed of the same colour.

TAKING PARTRIDGES WITH BIRDLIME.

GET the best and largest wheat-straws you can and cut them off between knot and knot, and lime them with the strongest lime. Then go to the haunts of partridges, and call; if you are answered, prick your limed straws at some distance from you, in many cross-rows and ranks: cross the lands and furrows, taking in two or three lands at least; then lie close and call again, not ceasing till you have drawn them towards you, so that they be intercepted by the way by your limed straws. These they no sooner touch than they will be ensnared; and as they run together like a brood of

chickens, they will so besmear and daub each other, that very few will escape.

This way of taking partridges is only to be used in stubble fields, from August till Christmas: but if you wish to take them in woods, pastures, or meadows, then you must lime rods, as mentioned for pheasants, and stick them in the ground after the same manner.

TO TAKE WOODCOCKS BY DRAW-NETS, ETC.

WOODCOCKS seldom, if ever, fly in the day-time, unless forced to it by man or beast, and then they retire into thick woods, where there are void spaces, covered on all sides, in which they remain the whole day, searching for earth-worms under the leaves, &c. When night comes, they go out of the woods in quest of water, where they may drink and wash their bills, which they have fouled by thrusting into the earth; and having passed the night in meadows, as soon as the day begins to appear, they take their flight to the woods. In their flight they use shady places, and coast it along a great way in search of the tallest woods, that they may be the more concealed, and be more under cover from the wind. They always fly low, till they find some glade to go across, nor dare to fly among trees, because, like hares, they cannot see well before them, for which reason they are easily taken with nets spread along the forest, or in the glades. Draw-nets are very pro-

fitable in such countries as are very woody, for you sometimes may take a dozen of woodcocks in them.

Suppose then that your range of wood be about three hundred paces long, more or less. In some place towards the middle, cut a walk through it, so that there may be a space of twelve yards between the tree A and the tree B, as above; it must be well cleared, and without trees, bushes, underwood or stones, and twelve yards square; then prune or cut off all the front boughs of the two trees, A and B, to make way for the net to hang and play without being entangled. The next thing is, to provide two strong logs of wood, which open or cleave at the biggest ends, as marked C and D; tie the middle parts fast to some boughs of the tree, as the letters E and F direct, and let the tops hang over, as G and H represent; the next may be a

little distance from the trees. You should always have in readiness a good store of pulleys or buckles, made of box, brass, or the like, which should be about the size of a man's finger, according to the form designed by the second figure, and fasten one at each end of the perches or logs, G and H. Having tied your pulleys marked 3 to the two branches, with a cord of the thickness of the little finger, then tie another knot in it, about the distance of a hand's breadth from the knot marked 4, and so let the two ends of the cord 5 and 6 hang down about a foot long each, that you may fasten them to the pulleys, which are at the end of the perches or logs, as represented by the letters I and L, close to the notches of the perches G and H. These notches serve to hinder the pulleys from descending lower than the place where you would have them remain. Then insert into each pulley a small packthread, and let the end of each reach to the foot of the trees, that by the help of them you may draw up two stronger cords into the same pulleys where you hang the net, without being always forced to climb up into the tree: these latter you may let remain, provided you live among honest neighbours. The last thing to be provided is a spot where you may lie concealed, and wait for the coming of the woodcocks; it matters not on which side, provided it be forty or fifty feet from the middle of the net, as at the place marked R. About half a dozen boughs of the height of a man interwoven may serve for a stand. You may sit upon a little haulm or fern, and at three

or four feet distance from thence towards the net, force a strong stake into the ground, at the place marked Q ; whereon fasten the lines of the net when it is drawn up. It is not necessary to make use of two pulleys ; one only is enough on a side, as at N, and the other at I. Tie a long pole at one of its ends, and let the other be fastened to a tree a little above C, by a cord, which will give the pole liberty to be raised up or lowered, as you would raise up or lower the net ; the sportsman should have one cord to hold, and place himself on the side of the tree B, where he may not be discerned.

When a woodcock is taken, the net must be let down as readily as possible, for he may by struggling make his escape. The net must be immediately set up again, for it may happen that the other woodcocks will come in and be taken ; which you may miss, if tedious at your work.

It often happens, that a man perceives a great thoroughfare of birds between some coppice or timber-woods, over a piece of ground, where he wants the conveniency of a good tree, to oppose some other, which possibly stands according to his mind ; but whether he wants one or two, if he finds the place likely, let him take one or two trees fit for the purpose, and plant them deep in the ground, that they may stand all weathers.

If you would take woodcocks by nets in high woods, by driving them into them, your net must be

like the rabbit-hays, but not so strong, and about forty yards long, and you should have two or three. Being provided with nets, and having the assistance of five or six persons to go into the wood with you, (which should be seven or eight years' growth, the older the better,) go into some part about the middle, if it be not too large, and pitch your nets along as you do for rabbits, but one joining to the other slopewise hanging over towards where you design to drive the cocks.

Your nets being thus fixed, let your company go to the end of the wood, at about ten rods asunder, and having sticks in their hands, make a noise, also using their voices as if they were driving cattle along, and go forward till you come to the place where the nets are set, and you will not fail to catch those in that part of the wood: when such part of the wood is thus driven, turn your net slopewise on the other side, and going to the other end, observe the same directions: you may, by these means, take them at any time of the day.

Such as may wish to take woodcocks in a wood, by gins, springes, and nooses, need not lose any time, after they have set them, but go at four in the afternoon, and the effect will be much the same: they must be provided with several dozens of these snares, more or less, according to the places in the wood where the woodcocks are. These nooses are made of good long horse-hair, twisted together, with a running buckle at one end, and a knot at the other, which is passed through the

middle of a stick cleft with the point of a knife ; then open it, and put in the end of the horse-hair noose, make knots to keep it tight, and also to hinder it from passing through the cleft : this stick is about the thickness of the little finger and about a foot long, being sharp-pointed at one end, the better to fix it in the ground. Having bundled them up, go into a coppice, such as has most leaves, in order to find if any woodcocks are there ; this may be perceived by the leaves on the ground, which will be ranged both on one side and the other by the woodcocks, in searching for worms under them, and by their droppings, which are of a dark grey colour. When you find there are woodcocks there, take a round of about forty or fifty paces, which is represented by the following directions :

The most proper places for this purpose are amongst bushes and small coppices, and the manner thus. Suppose the branches marked A B C D E were so many stumps ; make a small hedgerow, of half a foot high, of broom, furze, brambles, &c., from one stump to another, leaving a gap in the middle for the woodcocks to

pass, as at F G H I ; so that the woodcock, walking in the wood in search of food, and finding this hedgerow, will follow it till he comes to the gap ; for he will never fly, and therefore you should fix the string there, opened in a round form, and laid upon the flat ground, supported only by some leaves. The form of the extended snares are represented in the foregoing plate.

If in walking in the woods you should find nooses, and the like, that are set five or six inches above the ground, such as are denoted by the letters F and G, it is a sign partridges frequent that place, and that persons come to take them. There are those who make little hedgerows of different lengths, and in different numbers, as they think fit, according to the game they suppose the place may afford.

It has been observed, that woodcocks in the night-time frequent springs and similar places, because they do not freeze ; and those persons who make it their business to catch them, will not forget in the morning to walk along the sides of rivulets, springs, marshes, and ditches, that are under the covert of woods, in order to find out whether any woodcocks had been there the night before ; for they will not fail to return thither if they have been once there before, and therefore snares should be laid for them, as represented above.

Suppose the oblong square, denoted by the letter H, should be a ditch full of water, frequented by woodcocks, and that its bank should be that side represented by the figures 2, 3, 4.

Stop all other places, by which they can come at the bank of the ditch, from 2 X as far as A Z, with broom and the like things, and on the fairest bank make a small hedge, 2, Y, P, 3, M, N, about five or six inches high, and about half a foot distant from the water; but in this hedge leave gaps at the distance of about five or six feet from each other, more or less, according to the extent of the place. These passes are denominated by the letters P, 3, M, N, where the snares or springes are

laid. Those who follow this sport, fix at the edge of the gap, five inches high, and not so thick as a man's little finger, and within half a foot of the other side of the pass, a small bow, two or three fingers high, which forms, as it were, a round gate or door facing the stick A.

Then have a small wooden flat crochet, seven or eight inches long, with a notch in it, near the end R, which put into the stick A, and the other end pass under the

bow; also take a switch of hazel, or some other wood, that being folded will grow straight of itself; this rod, a finger thick, and about three feet long, fix in the small hedge; tie to the end V a packthread, half a foot long, to the end of which fasten a horsehair snare or springe, with a small stick cut at both ends, and made like a wedge to cleave wood with. The reject must be folded and pass the letter P underneath the bow, and the same must also be done by the end of the small stick; fasten it under the edge S of the bow, and raising the bird-trap or snare, fix the other end of the stick in the notch R, by which means the machine will be kept tight, then extend the snare P into a round, or over the trap; but it must be so pliant, that as soon as the woodcock passes through, and sets his foot upon the trap, the reject will immediately unbend, and catch him by the leg.

Others fasten a small circle to the trap, that the woodcock may have more room for his feet, and so make the reject of use to catch him; for it may happen, that, as he crosses the gap, he does not pass over it.

• This second device, with the circle, is represented by the letter K.

TO TAKE WOODCOCKS WITH BIRDLIME, ETC.

WOODCOCKS and snipes are difficult to discover, on account of their lying close, and not resorting much together, especially in the day-time.

The custom of woodcocks is usually to lie on banks by hedges and ditches exposed to the sun; and you may take notice, that on a day after a moonshiny night, they will suffer you to come nearer to them, and find them, better than after a dark night.

Snipes naturally lie by the sides of rivers, when all plashes are frozen, and always with their heads up or down the stream, and not across it. In order to find them, a person must be expert in the knowledge of their colours.

In order to take woodcocks, &c., with birdlime, provide yourself with sixty or seventy twigs, which daub with birdlime neatly and smoothly; and having found their haunts, which you may discover by their droppings, generally in low plashy places, and such as have plenty of weeds, and are not frozen in frosty weather; there set your twigs, more or less, as you think fit, at about a yard distance one from the other, placing them so as to stand sloping, in various ways; and if you design to see sport, you must be concealed. If there be any other open places near to that in which you have set your twigs, beat them up, or else set twigs there too.

PART THE FIFTH.

METHODS FOR TAKING SMALL BIRDS.

THERE are various ways of taking birds, one of which is in the night, with a low-bell, hand-net, and light; a sport used in plain and campaign countries; also in stubble fields, especially those of wheat, from the middle of October to the end of March; and that after the following manner:—About nine o'clock at night, when the air is mild, and the moon does not shine, take your low-bell, (of a deep and hollow sound, and of a size that a man may carry it conveniently with one hand,) which tolls in the manner of a sheep while it feeds. You must also have a box, much like a large lantern, about a foot and a half square, big enough for two or three great lights to be set in it. Let the box be lined with tin, one side open, to cast forth the light: fix this box to your breast, and the light will be cast a great distance before you, very broad, whereby you may see any thing that is on the ground within the compass of the light, and consequently the birds that roost on the ground.

Then, for taking them, have two men with you, one on each side, but a little behind, that they may not be within the reflection of the light that the lantern or box casts forth; each of them must be provided with a hand-

net of about three or four feet square, fixed to a long stick, to carry in their hands ; and when either of them sees a bird on his side, he must lay his net over it, and so take it up, making as little noise as possible. They must not be over hasty in their operations, but let him that carries the light and low-bell be the foremost, for fear of raising others, which their coming into the limits of the light may occasion ; for all is dark, except where the light casts its reflection.

It is to be observed, that the sound of the low-bell causes the birds to lie close, and not dare to stir, while your nets are passed over them, the light is so terrible to them ; but you must be quite silent, lest you raise them.

If you wish to practise this sport by yourself, carry the low-bell in one hand, as before directed, and in the other a hand-net, about two feet broad and three feet long, with a handle to it, to lay upon them as you spy them. This way is sometimes preferred to the former. But, instead of fixing the light to the breast, as before stated, some tie the low-bell to the girdle, by a string which hangs to the knees, when their motion causes the bell to strike ; they then carry the light in the hand, extending the arm before them ; in which case, however, the lantern or box should not be so large as that which is fixed to the breast.

Another way of taking small birds, is by bat-fowling ; this being likewise a night exercise. By this means you may take all sorts of birds both great and small, not

merely such as roost on the ground, but on shrubs, bushes, hawthorn trees, and the like places.

The depth of winter is the best season for this sport ; and the darker the night, and colder the weather, so much the better.

As to the manner of bat-fowling, it may be practised with nets or without : if without, suppose your company be twelve, let one-third part carry poles, to which little bundles of dry hay or straw, dipped in pitch, rosin, or the like (so that it will blaze), must be bound at top : another third part of the company must attend at the fires with long poles, rough and bushy at the upper end, to knock down the birds that fly about the lights : another third part must have poles to beat the bushes and other places, to cause the birds to fly about the lights ; which they will do as if amazed, not departing from them, so that they may be knocked down.

It will be proper for one of the company to carry a candle or lantern, that in case the lights be extinguished, they may be kindled at pleasure ; and be sure to observe the most profound silence, especially till the lights are kindled.

Another way with nets is performed thus :—Let two or three go with lanterns and candles lighted, extended in one of their hands, such as before described when using the low-bell ; and in the other hand small nets, like a racket, but less, fixed at the end of a long pole, to beat down the birds as they sit at roost ; which, surprised with the great blazing light, will not stir until

they are knocked down. A cross-bow, for this kind of sport, is very useful, to shoot them as they sit.

Some take great and small fowl by night, with a long trammel-net, which is much like the net used for the low-bell, both for shape, size, and mesh. This net is to be spread upon the ground, and the nether or further end being plumbd with small plummets of lead, should lie close on the ground; and, at the two foremost ends only, being borne up by men, let it trail along the ground; not suffering the end which is borne up, to come near the earth by at least a yard. At each end of the net must be carried great blazing lights, as before described; and some men should be stationed by the lights, with long poles, to raise up the birds as they go, and as they rise under the nets to take them.

There are various ways of taking small birds, when the ground is covered with snow; as the following, for instance:—Fix upon a place in your yard or garden,

from which you may see the birds, about twenty or thirty paces from a window or door, where they cannot see you, that they may not be frightened; clear this place of the snow, to the breadth of six or seven feet, and of the same length, so as to form a square, as represented in the preceding plate.

Within the lines O, P, Q, R, place a wooden table, or door, in the middle, as at A, to which you must have fastened before, at the sides B, C, D, E, some small pieces of pipe-staves, about six inches long and one broad; but previous to nailing them on, make a hole exceeding the thickness of the nail, that it may turn loosely upon it.

You are to place under the four ends which are not nailed, four pieces of tile or slate, to hinder them from penetrating into the ground, as you may see at F and G, in such a manner that the table may not be fixed, but with the least movement fall down.

Make a small notch, or little stay, in the end of the table, at the place H, in order to put into it the end of the staff marked I, which should be seven inches long and one broad; the other end should rest upon a piece of tile or slate, so that the door, or table, thereon, would be ready to fall towards the house, were it not sustained by the piece of wood, which is bored towards the middle, in order to put in and fasten the end of a small cord, the other end of which is conveyed to the window or door, M, N, designed for this purpose.

This done, put some straw upon the table to cover it,

with some corn underneath, and a little about it. As soon as the birds see the earth free from snow, and covered with straw, they will fly thither; and when they have eaten up the corn about the table, they will also proceed to feed upon that under it. You must from time to time peep through some hole in the door, or leave it a little open, and when you find the birds have got under the machine, pull the cord M, which will pluck out the stick I, and the table will fall upon them, which you must presently seize, and set your machine as before. If the table is not heavy enough of itself to fall readily, lay something upon it to increase its weight, provided it be not the means of frightening the birds.

Small birds may be taken in the night-time with nets and sieves: they retire in the winter time into coppices, hedges, and bushes, to shelter themselves from the severe cold and winds, which incommode them. The net made use of for this purpose is that which the French call *carralet*, as under:

Take two poles, let them be straight and light, of the length of ten or twelve feet, that the net may be

lifted up high enough to enable you to take the birds : tie the net to these poles, beginning with the two corners at the two small ends ; tie the other two corners as far as you can towards the two thick ends of the poles ; fasten packthreads all along at both the sides, or two or three places, to each. There must be three persons employed, one to carry the net, another the light, and a third a long pole.

As soon in the night as you have got to the place whither you think the birds are retired, having found a bush, or kind of thicket, the net must be unfolded, and pitched the height of the bush. It must be so arranged, that it be placed between the wind and the birds ; for it is the nature of all birds to roost with their breasts against the wind. The person with the lighted torch must stand behind the middle of the net, and the third must beat the bushes on the other side of the hedge, and drive the birds towards the light.

In great timber woods, under which holly-bushes grow, birds usually roost ; and there good store of game is to be met with.

By this way twenty or thirty dozen birds have been taken in one night.

This sport is always better when the weather is cold and dark.

TO TAKE BIRDS WITH BIRDLIME.

PITCH, early in the morning, upon a place in a piece of ground remote from tall trees ; and hedge, or stick in the ground, three or four branches of coppice-wood, represented in the cut as A, B, T, five or six feet high ; and so intermingle the tops of them, that they may keep

close and firm like a hedge. Take two or three boughs of blackthorn, as C, D, let them be thick and close, and place them on the top of the coppice branches, where you must make them stick fast ; provide yourself with four or five dozen of small lime-twigs, nine or ten inches long, and as slender as can be got ; smear them over with birdlime, within two inches of the thick end, which must be cleft with a knife ; place them there and upon the hedge, and let them be kept up by placing the cleft end slightly on the point of the thorns. The

middle should be borne up a little with some higher thorn, so that the twigs may stand sloping, but without touching one another; ranging all in such a manner, that a bird cannot light upon the hedge without being entangled.

You should always have a bird of the sort you design to catch, and bring it up in a small cage that is light and portable. These cages must be placed upon small forked sticks, as F, G, ten inches from the ground, stuck on one side of the artificial hedge or bush, at two yards' distance: after which retire thirty paces towards S, where you are to stick two or three leaved branches in the ground, which may serve for a lodge or stand to hide yourself.

When you have taken three or four birds of any sort, you must make use of a device represented by the second figure. Take a small stick, I, H, two feet long, and fix it upright in the ground, at the distance of about four yards from the tree; fasten a small packthread to the end I, which must be on a small forked stick, L, M, two feet high, and fix it in the ground eight yards distant from the other I, H; let the end of it be conveyed to your stand, then tie the birds you have taken by the legs to that packthread between the stick I, H, and the forked one L, M: the letters N, O, P, Q, R, represent them to you: the thread made use of for this purpose must be two feet long, and so slack that the birds may stand upon the ground. This done, retire to your stand; and when you see some

birds fly, pull your packthread S, and those that are tied will take wing, by which means you may take a great many; for those that hover in the air, perceiving the others fly, will imagine they feed there, and coming down, so light upon the lime-twigs; from which you may take them.

As soon as the small birds have done with their nests, which will be about the end of July, you may take them in great numbers, when they go to drink, along rivulets, and about springs, ditches, and pools, in the fields and woods.

Suppose the place marked with the letter A, in the above plate, should be the middle of a ditch, or pool full of water, where birds come to drink. Make choice of a bank where the sun comes but little, as at B; remove every thing that may obstruct their coming easily at the water; take several small lime-twigs, a foot long, and smear them over, to within two inches of the thickest end, which must be sharp-pointed, in order to fix them in a row along the bank B, in such a manner that they

may all lie within two fingers' breadth of the ground: they must not touch one another. When you have inclosed this bank, cut some small boughs or herbs, and place them all round the water at the sides marked C, L, Y, where the birds may drink, and this will oblige them to throw themselves where the lime-twigs are, which they cannot discern. Leave no place uncovered round the water where the birds may drink, but that at B; then retire to your stand to conceal yourself, but so that you may see all your lime-twigs, and when any thing is caught, hasten to take it away, and replace the lime-sticks where there is occasion. But as the birds which come to drink examine the place where they are to alight for it, they do not drop at once, but rest upon some small trees, if there are any, or on the summits of copse, and after they have been there some time, move to some lower branches, and a little after alight on the ground; in this case, you must have three or four great boughs, like those represented at the side Y, which you are to pitch in the ground at the best place of access to the ditch, about two yards distant from the water. Take off the branches from the middle nearly to the top, and let the disbranched part slope towards the water, make notches therein, at three fingers' distance from each other, in order to put in several small lime-twigs, as you see by the plate. You must lay them within two fingers' breadth of the branch, and so dispose them in respect to one another, that no bird which comes to alight thereon can escape being entangled; it

is certain, if you take six dozen of birds, as well on the boughs as on the ground, you will catch two-thirds on the branches at Y.

The time for this sport is from two in the morning till half an hour before sunset, but the best is from about ten to eleven, and from two to three; and lastly, an hour and half before sunset, when the birds approach to the watering place in flocks, because the hour presses them to retire, and go to roost.

The best season for this diversion is when the weather is hot: you must not follow it when it rains, nor even when the morning dew falls, because the birds then satisfy themselves with the water they find on the leaves of trees: neither will it be to any purpose to pursue the sport when the water, after great rains, lies in places on the ground; it must first dry up, or else you will lose your labour.

FOR TAKING SMALL BIRDS, THAT FREQUENT HEDGES AND BUSHES, WITH LIME-TWIGS.

THE great lime bush is best for this use, which you must make after this manner: cut down the main branch or bough of any bushy tree, whose branch and twigs are long, thick, smooth, and straight, without either pricks or knots; the willow or birch is the best. When you have trimmed it from all superfluity, making the twigs

neat and clean, then take the best birdlime, well mixed and wrought together with goose-grease, which being warmed, lime every twig therewith within four fingers of the bottom.

The body from whence the branches have their rise must be untouched with lime.

Be sure you do not daub your twigs too much, for that will give distaste to the birds: yet let none want its proportion, or have any part left bare which ought to be touched: for as too much will deter them from coming, so too little will not hold them when they are there. Having so done, place your bush in some quick-set or dead hedge near towns' ends, back yards, old houses, or the like; for these are the resort of small birds in the spring time. In the summer and harvest, place your bush in groves, clumps of whitethorn trees, quickset hedges near corn fields, fruit trees, flax and hemp lands; and in the winter about houses, hovels, barns, stacks, or those places where ricks of corn stand, or chaff is scattered.

As near as you can to any of these haunts plant your limed bush, and place yourself at a convenient distance, unexposed, imitating with your mouth several notes of birds, which you must learn by frequent practice, walking the fields for that purpose very often, observing the variety of several birds' sounds, especially such as they call one another by.

Some have been so expert herein, that they could imitate the notes of twenty different birds at least, by

which they have caught ten birds to another person's one that was ignorant.

If you cannot attain it by your industry, you must procure a bird-call, of which there are several sorts, easy to be made ; some of wood, some of horn, some of cane, and the like.

Having learnt first how to use this call, you must sit and call the birds to you, and as any of them light on your bush, do not attempt to take them till you see them sufficiently entangled ; neither is it requisite to run for every single bird, but let them alone till more come, for the fluttering is as good as a lure to entice others.

This plan you may use from sunrise till ten o'clock in the morning, and from one till almost sunset.

You may take these small birds with limed twigs only, without the bush, in this manner :—

Take two or three hundred small twigs, about the thickness of rushes, and about three inches long, and go with them into a field where hemp cocks are : upon the tops of about ten of the cocks, which are nearest together, stick the twigs, and then go and beat about that field or the next, where you have seen any birds ; and commonly in such fields there are infinite numbers of linnets and green-birds, which are great lovers of hemp-seed : these birds flying in such vast flocks, a number may be caught at one fall of them upon the cocks.

There is another way of taking birds with limed

twigs, by placing near them a lure or two made of live bats. In order to render your lure more conspicuous, place it on something elevated, that it may be visible to the birds thereabout ; it will no sooner be perceived, than every bird will be attracted to the spot, and having no other convenient lighting-place but where the lime-twigs are, you may take a great number of them. But the owl is a far better lure than the bat, being larger, and therefore the more easily to be perceived ; besides, he is never seen without being followed and persecuted by all the birds that are near.

If you have not a living bat or owl, a stuffed one will answer the same purpose : there are some who have used an owl cut in wood, and naturally painted, with good success.

ANOTHER METHOD OF TAKING SMALL BIRDS WITH BIRDLIME.

In cold weather, that is, in frost or snow, all sorts of small birds gather together in flocks, as larks, chaffinches, yellowhammers, buntings, sparrows, &c.

All these, except the lark, perch on trees or bushes, as well as feed on the ground.

If they resort about your house, or adjacent fields, then use birdlime, that is well prepared and not too old, in the following manner :—

Put the birdlime into an earthen dish, adding to it

some fresh lard or capon's grease, putting one ounce of either to a quarter of a pound of birdlime. Then set it over the fire, and let it be gently melted, taking care not to let it boil, as that would destroy its strength.

It being thus prepared, and having furnished yourself with a quantity of ears of wheat, cut the straw about a foot long, exclusive of the ears, and lime them for about six inches, from the bottom of the ears to the middle of the straw; the lime being warmed so as to run the thinner upon the straw, and be the more imperceptible, and less liable to be suspected by the birds. Then go into the fields, carrying with you a bag of chaff and threshed ears, which you must spread on the ground for the space of about twenty yards in width, (this will be best in snowy weather,) then stick up the limed straws, with the ears leaning, so that the ends touch the ground, then retire from the place, and beat the grounds round about. By these means you disturb the birds in their other haunts, and cause them to fly to the place where the chaff and corn have been scattered, and the limed straws set up, when they will peck at the ears of corn, and finding that they stick upon them, they will instantly fly away: the limed straws, lying under their wings, will cause them to fall; and not being able to disengage themselves, they may be taken with ease. You must not, however, take them up when you see only five or six entangled, for that may prevent you from taking as many dozens at a time.

If they are larks that fall where your limed straws

are, do not go near them till they rise of themselves and fly in great flocks; by this method some have caught five or six dozens at a time.

Some of these straws may be laid nearer home, for taking sparrows, chaffinches, yellowhammers, &c., which resort near to houses, and frequent barn-doors; where they may be easily taken by the foregoing method.

Having performed this in the morning, take away all the limed ears, that the birds may feed boldly, without being disturbed or frightened; in the afternoon, bait the same place with fresh chaff and ears of corn, and let them remain there till the next morning; then having stuck up fresh limed straws, commence your amusement.

TO TAKE WHEAT-EARS, LARKS, AND QUAILS.

WHEAT-EARS are taken under ground, as follows:—Dig two pits of earth, in the form of the letter V; put two single hair nooses into a stick, split in the centre, with two ends left whole; lay it across the centre, with the bottom of the nooses within an inch of the bottom; then lay the earth over them, leaving the two ends open about six inches long, into which they will go freely; when they come to the centre, the light appearing from the other side induces them to proceed, and in turning the corner they are taken.

LARKS are taken by springes or long cords laid across each other, at any length you please. Stake them at the ends, open the nooses at least two inches in diameter, and place them equal on each side of the twine ; then sprinkle a little chaff in a ridge over them, quite thin. Place yourself in a ditch, ready to take them out.

QUAILS are taken by a call, by which you will find where they are ; then get the wind of them ; lay your net, which should be eight yards by eight in size, and two inches and a half meshes, on the stubble ; silk is best. Lie behind the net, and imitate their note. If the cock answers, mimic the hen ; and if she answers, mimic the cock, and they will come quite close. When under the net, crawl up to it, and tread the edges down, and take them out. In their wooing time, which is from March to July, as with partridges, they are easily taken ; but it is better to wait for the bevy till the latter end of August.

PART THE SIXTH.

RABBITS.

THERE are two sorts of rabbits, viz. the wild and the tame : those that are wild are bred in warrens, are smaller and more red, have active bodies, are shy and watchful, and their flesh is more delicious from the liberty they enjoy, and the superior nature of their food ; they are more lively than the tame ones. The tame

are sometimes made use of to supply warrens; and there, in process of time, they become more active and wild.

The males being given to cruelty, kill all the young ones they can come at; therefore the females, after they have kennelled, hide them, and close up the holes in such a manner, that the buck may not find them: they increase wonderfully, bringing forth every month; therefore, when kept tame in huts, they must be watched, and, as soon as they have kennelled, must be put to the buck, for they will otherwise mourn, and hardly bring up their young.

In the choice of tame rabbits, you need not look to their shape, but to their colour: the bucks must be the largest and finest you can get: and that skin is esteemed the best that has the most equal mixture of black and white hair together: but the black should rather shadow the white: a black skin with a few silver hairs, being far preferable to a white skin with a few black ones.

As to the profit of tame rabbits, every one that is killed in season, that is, from Martinmas till after Candlemas, is worth five others, as being much better and larger: and the skin will fetch more money. Again, the increase is more: the tame ones, at one kennelling, bringing forth more than the wild ones; besides, they are always ready at hand for the dish, winter and summer, without the charge of nets, ferrets, &c., and their skins paying their keeper's expense, with interest.

One doe will produce eight litters in a year. The

average of five at a litter is forty, which, at 1s. 6d., will amount to 3*l*.; at which rate forty does will bring 120*l*. yearly. The manure (which is very excellent) will pay half their food, and the extra prices at which the breeding does and bucks are sold will cover losses.

Proper food for tame rabbits is the sweetest, shortest, and best hay you can get; one load will feed two hundred couple a year, and out of the stock of two hundred, as many as are sold in the market may be used in the house, and yet a good stock maintained to answer all casualties. The hay must be put to them in little cloven sticks, that they may with ease reach and pull it out, but so as not to scatter or waste any; and sweet oats and water should be put for them in troughs under the boxes; this should be their ordinary and constant food, all other being given medicinally. Two or three times in a fortnight, give them green victuals, to cool their bodies, but sweet grain should be seldom used, as nothing rots them sooner.

In hot weather use pollard with pea-meal, instead of grains, as they must not be given when sour; young clover, tares, &c. When they get pot-bellied, give them young green broom, and some bread well toasted.

Great care must be taken when any grass is cut for them where there are weeds, that there is no hemlock amongst it, for though they will eat it greedily, it is present poison, and suddenly kills them. Their huts must be cleaned every day, as the stench arising from their ordure greatly annoys them.

The infirmities to which tame rabbits are subject are twofold : first, the rot, which comes of giving them green meat, or gathering greens for them which have the dew on ; therefore, let them have it but seldom, and then the dryness of the hay will absorb the moisture.

Secondly, there is a certain madness sometimes among rabbits, caused by the rankness of their keeping, and which is known by their wallowing and tumbling with their heels upwards, and leaping in their huts ; to cure this, give them tare thistles to eat.

Wild rabbits do a great deal of damage to trees, and all sorts of corn, their teeth sparing nothing that they come near ; to prevent this, take some very small sticks of willow, well dried, dip one end in some melted brimstone, and stick the other into the ground ; let them be about six feet distant from each other, and set fire to them.

Rabbits are taken in various ways. If in cover, they afford excellent sport with the gun. If the covers are large, quarter them with a reel made of long feathers, on a cord ; this, set about six inches high, will keep them up to the guns. If they lie in hedgerows, double them, and plant one or two guns at the end where the racks meet, and you will be sure of sport. If they are in the ground, ferret them out, and take shots at them as they run. If you want to extirpate them, use nets and wire with the guns. In warrens, they trap them at the mouths of the eyes (here you will take stoats, &c.), and wire them in the “ chops.” Pitfalls are made with dou-

ble falls, meeting each other, covered over similar to the common hutch-traps, but without doors ; the drop is in the centre : these should be winged.

When you intend to wire, go in the morning dew, in dry weather ; put down tillers where you intend they should stand, and lay a small piece of white paper opposite every one, to find them by. In the evening, go and plant your wires, which must have stumps to drive into the ground : this may be done easiest with a mallet. Set them, bottoms three inches from the ground, right over where they pitch, in the short cross-paths called chops, in the middle of fields. When you can get a few carrots, lay them along in the deep sides of furrows, about two yards distant ; plant a trap betwixt them, as they will quickly run from one to another. In winter, when the snow lies on the ground, these, or parsley, are sure to draw them. Where furrows lead to covers or holds, plant in them and the main paths at evening ; then go in the night and drive the rabbits in with dogs, or a flint and steel is a good substitute. The striking and walking at the same time will cause them to run towards home. You may smoke them out of their holds with powder of orpine and stone brimstone. When you wire in cover, discover on which side of a ride the holds are ; and on the contrary side to that from whence they are coming to feed, about a yard in, plant your wires, as they come out very cautiously, and pass very quickly into the other side, where they are taken. This is performed in their main paths.

RABBIT-SHOOTING.

HOWEVER it may appear to the inexperienced, it is a known fact that there is as much or more caution necessary in rabbit-shooting than perhaps in the taking of any other game. The best weather for this sport is in the intervals of storms, when the sun breaks forth with renewed splendour, and when there is little wind moving. In this sort of weather, rabbits will feed at all hours of the day, and are more easy to come at than when the weather is dry. The best way of approaching them unobserved is by wearing dark clothes, and always crouching as near the ground as possible, with a slow and regular pace. In coming up to them it is best to have the wind in the teeth, as that hinders them from scenting any one until within gun-shot. If a sportsman should come upon a number of them feeding together, and, on account of their size, not be able to distinguish young from old, by a gentle whistle, or other small noise, it will be found that the old ones will immediately seek the covert, while the young ones remain pricking up their ears. For shooting rabbits in winter, first provide dogs of good nose and foot, who will stick close to the same rabbit till he is either earthed or shot. Terriers, some think, answer the purpose best. The most proper station to be taken is in a tree, near the earth, which should be previously stopped, or at the corner of a wood

commanding two ways. Some people think No. 3 the best shot for rabbits, as they require a very hard blow.

Gentlemen or farmers wishing to protect any piece of ground from rabbits, have only to place round it a piece of *newly-tarred* cord, which no rabbit will pass. It is also understood, that a slice of turnip, placed at the entrance of each *muish*^a, will effectually deter any hare from passing through.

FERRETING RABBITS.

FERRETING rabbits is performed by covering the mouths of the *burrows* in a hedgerow, or any place where they lie convenient for being well attended with *purse* nets. A sufficient number of attendants must be properly placed, and the profoundest silence observed. The ferrets, or *cats*, as they are styled, must be *coped*, that is, muzzled, or have bells tied round their necks, or they might not be recovered. The man who earths the cat, should keep on the windward side of the burrow, a general rule to be observed ; for if the degree of alarm be too great, the rabbit will rather remain, and be torn in pieces, than bolt. The instant a rabbit is netted, the person waiting must throw himself upon it, and kill it as speedily and with as little noise as possible ; but there is no sport unless rabbits are quite plentiful.

^a Meuse, in modern phraseology.

PART THE SEVENTH.

FISH PONDS.

PONDS should be kept clean, as fish will not thrive in the dark, and among filth. The process is as follows:— To take the mantle off the water, lash bits of scorrels, about four feet long, to each other, with spunyarn, length according to the sheet of water; choose convenient places to take it out; lash one end to a stake, and the other to the stern of a boat, then shove the boat round as much as you can of the mantle, and have a man with a three-pronged fork to throw it out, as it is driven on shore. To cut weeds from the bottom, collect a number of old scythes, cut the cranks off, and a piece of the points; have them riveted end to end, so that they have liberty to move; fasten a line to each end. By drawing them to and fro, you may clear the bottom.

In stocking ponds, put from three to five spawners to one milter: sixty brace of carp, and forty brace of tench per acre, if a quick stream. Bushy wood should be put into the breeding-ponds, for the spawn to hang upon. When store-ponds are drawn off, make creeps with sods of flot grass, set up leaning to each other, and sow oats in them. If there is another pond to preserve the fish in, let the oats be ripe before you let the water in, then remove the fish back. Select the largest, and

put into your stews. If two, you can have different sizes, each by themselves: if thought proper, the spawners and milters may be kept separate. It is good to feed them in the stews, with corn, wash from a scullery, and new grains mixed with blood, &c. Your stews should be down a reach, or stream, and good pond-stocks, so that the water can be quickly drawn off, when, with a landing-net, you can take fish out at a short notice.

FISHING.

THIS sport is divided into netting, snaring, bobbing, and angling with rod, hook, and line; and a variety of baits—living, artificial, or dead. Of river fish, the most esteemed are the salmon, trout, pike, grayling, perch, roach, dace, chub, barbel, pope or ruff, smelt, gudgeon, and eel. The principal pond-fish are carp, tench, and eels.

The fishing-tackle should in the first instance be purchased; but if home-made, the rod should be ground hazel, the cob-nut is best, though ground ash is sometimes used. For the bag-rod, hickory and bamboo shaved are the best; the joints must be made to fit with the utmost nicety. The salmon-rod is generally made of ash, with a whalebone top. Lines must be made of horsehair or silk; the hairs even, and of a gray or white colour for clear water, but of a reddish brown

or chestnut for muddy water, or ground angling. Floats should be made of the hardest and best quills, and their load so well constructed that the float may be kept perpendicular with the top, just above the surface of the water, so as to be moved or drawn by the slightest nibble. A cork float, nearly the shape of a spinning top, is used for fishing with a heavy bait; the cork employed must be completely sound, and carefully bored through the centre with a red-hot wire; then cut across the grain about two-thirds of its length, and the remaining third or summit of the float rounded, and smoothly finished with pumice-stone. For the convenience of disengaging the fish taken by float-fishing, the line should be about a foot shorter than the rod; and the length of the rod about fourteen or fifteen feet, light, stiff, and elastic, so as to strike at the extremity of the whalebone. For bottom fishing, the following tackle will be found requisite:—

Lines of various sorts, carefully rolled, and good single hairs; loose hooks, of various sizes; hooks tied to coarse or fine gimp; floats of cork and quill, with spare caps; split shot and small bullets, to advance the float; shoemakers' wax, for arming the hooks; silk of various sizes and colours, to tie them on; the colour of the silk to resemble that of the bait; a plummet to sound the depth of water. A clearing-ring, to disentangle the hook from weeds, &c., is to be run along the rod and let gradually down the line to the object which fastens the hook. If it is some immoveable object, the

line will break just above the hook when you pull the twine attached to your clearing-ring ; but if only weeds, let your ring descend below the hook, and it will break the weeds, and probably save both line and hook. To these must be added a sharp penknife, a pair of scissars, a small whetstone to sharpen the hooks, a landing-net, disgorger, and a light fishing basket or creel. The angler should always conceal himself as much as possible ; and if practicable, place himself so that his shadow may fall from the water. The best sport is generally found in deep holes clogged with weeds, or under the roots of old trees.

In fly-fishing, let the angler keep out of sight, by remaining as far as possible from the water-side, and fish down the stream, with the sun in his face, when it is practicable : the line may be twice as long as the rod, unless the river is weedy or full of other obstructions. In clear water, use a small fly with clear wings ; in muddy water, use a larger. The fly should be thrown on the water so neatly that the line do not touch it, and its colour should suit that of the water and air. Be provided therefore with a stock of orange, red-brown, black, and light-coloured flies. In slow or still waters, cast the fly across, and letting it sink a few inches, draw it leisurely back, when it will describe a circle. When you have a bite, strike instantly, or the fish will clear the hook. Continue walking down the stream, unless there is a strong wind, when it is better to remain near some sheltered and deep place.

Trimming is practised in still parts of a river, or in canals and large pieces of water. A round cork, half a foot in diameter, is used for this sport, with a groove, on which to wind up the line: the hook must hang about mid-water, and as much line be allowed on the other side of the cork as will reach to the bank, where it must be made fast; and thus one person may attend to several lines. When a pike or other fish runs off with the bait, the line veers off the trimmer, without a check, to the end. On taking up the line, a jerk is necessary to hook the fish.

Trolling is in use for pike, salmon, and eels. The trolling-rod is twelve or fourteen feet long; but a common rod may be employed, having a strong top fitted to it, with a small ring at the end for the line to pass through, and one ring on each joint, set on so straight that the line may run freely, and that no sudden check may prevent the fish from gorging the bait. The line must be silk, thirty yards long at least, and have a swivel at the end, to receive the armed wire or gimp; it is to be wound on a reel, fenced at the butt-end of the rod. When trolling hooks are too large, cut off the wire about an inch from the lead, and fasten about a foot of strong gimp securely to the wire, leaving a noose at the other end of the gimp, large enough to pass the bait through, to hang it on the line. When the hook is baited, it must be put gently into the water and kept in constant motion, sometimes being suffered to sink nearly to the bottom, and then gently drawn up again.

If pike are there and inclined to bite, they will do it soon : it is of no use to remain long at one spot, if you do not have a bite ; which when you do, you must be sensible of, even in deep or muddy water. Let your fish then have all the line he will draw, as he does not swallow the bait till he reaches his haunt, where he may be allowed from five to ten minutes to pouch the bait ; the line must then be wound up gently till the fish be seen ; this he will often suffer pretty quietly, even though he should not have gorged.

If the bait be still in or across his mouth, you must allow him more time. Should he be sensible of the hook, and be struggling to clear his mouth of it, endeavour to make it more secure by a jerk, and, by playing with the fish, tire it out ; but should he have swallowed the bait, veer out plenty of line, but mind to keep the fish clear of roots of trees or other impediments, till you can land him with your net. A large pike must not be lifted out of the water by the line and rod, as when suspended, he will by his weight most probably draw off the hook, and fall in again. Never, in trolling, throw the bait too far in, or you will alarm the fish. Pike are attracted by a large bait, but are more likely to be taken by a small one, which they will sooner swallow ; keep your bait clear of weeds. A rough wind, that is not cold, and clear water, are favourable for trolling ; it is seldom of any avail to fish for pike in troubled water. Pike are sometimes taken by ledger-baits, or lines left by night, and also by snaring with a

noose of wire fixed to a strong pole. The snarer attends to those deeps or holes to which pike resort during the greatest heat of a summer's day; then he gently slips the wire over the head and gill fins of the fish, and with a jerk hoists it to land. If it be a large pike, it requires considerable exertion to bring it to land. Pike are in season from May to February. The best months for trolling are February and October; in the latter they are in the best condition. Snap-angling is also practised for pike. The snap has two large hooks placed back to back, with a small one in the centre, on which to place the bait. The float is to swim down the current, and on perceiving a bite you must give a sudden jerk or snap: keep the line tight, and without giving him any play draw the fish to shore, and land him with the net. Very large pike can seldom be caught by the snap.

Trout are in season from March till Michaelmas, and are taken with live baits; the best for this purpose is the lob-worm: he is also taken with a fly, and will readily bite an artificial one: he will bite a fly on the surface, but it is better to sink it about half a foot. Trout generally shelter themselves under banks or large stones, or among weeds, with only their heads visible, and thus watch their prey. Proceed silently up the stream, and stir the water from the bottom with a pole, then throw the bait into the troubled water; when they will frequently take it immediately. The best trout are taken in the night; where they are plentiful they bite raven-

ously, lying on the top of the water, ready for their prey. Use no lead, but throw the bait gently across the surface, and draw it back towards you : trout and chub are dabbled for with a strong rod and a short line.

When you are angling, use ground-baits made with stale bread crumbled, or bran squeezed round a stone and thrown in ; these should be put into the eddies, where you intend to fish, a short time before. Strike the water with your pole a few strokes, and it will bring them. Trout are taken with a fly thrown and drawn on the surface of the water, jerking with the rod, as if it were skipping along. The flies should be made like those you find in the different months, using a dark one in a very bright day, and a light one in gloomy weather. The best time for fly fishing is when there is a little breeze, to make a small curl upon the water. Trout will take a frog in rainy weather. When you take jacks with flews, or by drawing water off, so as they are unhurt, put those that are fit to kill into shallow water, where you can take them with a sniggle ; pass it very slowly down the water before the fish, draw it over his gills, then with a sudden jerk you may throw him out. If there should happen to be a curl upon the water when you want a fish, pass a few drops of oil of amber down the stream or wind, where you want to take him, and it will, by causing a calm, enable you to see him.

TO TAKE AND PRESERVE EELS.

To take eels, there should be traps or brays at the heads of the ponds to receive them when they run in heavy showers, or pots filled with sheep's entrails, and sunk. In marsh ditches, use a net about twelve feet long in the cod, and nine feet wide; put three hoops of different sizes into the cod, to keep it open; corks and heavy leads in front, with a cord at each end to draw it up. Take distances about twenty yards at a time, first taking the eels out. When you find they strike into the mud, use spears. Bobbing in a creek, where the salt water comes in, is good sport. Anchor your boat across, into which you must throw them as quick as possible when you feel the check. The bob is made with coarse worsted passed through lob-worms, and coiled into a large bunch; this is to be put on a strong cord, on a pole a convenient length, with lead over the worms, about a pound weight.

To make a reserve of them, when taken, have a bricked cistern, three feet deep, that is fed by a running stream; put them into it, make a fagot with small round wood, and tie both ends with small chains: have another fastened to each of them, giving it length enough for the middle to reach near the curb of the cistern, where have a hook fixed to hang it upon. The eels will draw into the fagot, and by pulling it out quickly, you may suit yourself with a dish at pleasure. It is right they should be fed with good wash, mixed with blood.

PRESERVATION OF LIVE BAITS FOR ANGLING.

KEEP every kind by themselves. Put red or bramble-worm into a red cloth, with a handful of fennel, and some black rich mould, taken from the bottoms of elm-trees. Renew it every night, and every other day put a little fresh cow-dung to it. Large gentles or maggots should be put into sheep's suet or bullock's liver, cut small. Scour them in sand, in a flannel bag : hang them near the fire an hour or two, when in the suet or liver. Frogs and grasshoppers keep well in moss and grass, wetting it every night. Frogs may be killed before putting them on the hook, by pricking them in the spinal marrow. Fish will readily bite at them if moved about. Dry young wasps, hornets, and bees, slowly by the fire, then dip their heads in blood and honey mixed, and dry them again : these are good for carp and tench. Worms or gudgeons are for perch and eels. Paste for roach, dace, &c., is to be made as follows :—Take bean-meal, rabbits' flix, bees' wax, and sheep's suet ; beat them well in a mortar, with a little clarified honey ; temper the paste before a fire, and stain it with vermilion, or cherry-juice, if in season.

To dip your baits in when angling, take oil of asp, coculus Indicus berry, and assafœtida, equal quantities ; beat the berries well, and add as much honey as will bring it to a proper consistence. Keep it in a small jar,

well corked. This will impregnate the water, and draw the fish.

To draw fish, also, take sal-ammoniac, young chives, omentum, or calf's caul, of each a quarter of a pound: beat them in a mortar to a consistence to make pellets, and cast them into the corners of ponds; this will draw carp, chevin, or barbel. For roach and dace, wine lees mixed with oil, and hung up in a chimney-corner till it looks black. Or take two pounds of bran, one pound of white pea-meal, and a sufficient quantity of brine to bring it to a consistence, by beating it in a mortar. For perch and pike, use bullock's liver, black snails, blood and opoponax, beaten well.

PART THE EIGHTH: VERMIN TRAPPING.

FOR TAKING FOXES.

As the destruction of foxes is sometimes a part of the duty of the gamekeeper, we offer a few rules applicable to it, albeit an occupation which we hold as "more honoured in the breach than the observance:"—

To trap a fox in cover, make a shrape with some loose moulds where the hares' paths meet, and lay some small pieces of sheep's liver, broiled over wood embers, about it; draw a sheep's paunch, or oil of rhodium, on rags, from it in different directions. This should be done

about six o'clock in the evening ; or it may be done in the night. When you miss the baits, look for the prints ; if you perceive the ball of a fox, plant two traps, heads outwards, about six inches apart ; cover them very carefully. The bridge of a trap should bear a pound weight, *i. e.*, a pound weight should just spring it before it is covered ; this will allow a good depth of earth to cover it. Never touch the earth with your hands till you have rubbed them with the baits, and take away the pieces so used. Lay the baits as before, some in the centre, and two or three at the edge of the jaws of the trap : this will bring his pad on to the bridge. Never lay any baits on the bridge, as his motion is too quick to be caught by the muzzle.

If, on your shrape, you should discover the prints of a house-cat, marten-cat, pole-cat, or stoat, place a jay in the centre, fasten it down, and lay your other baits as before ; or part of a rabbit, cut open. Lighter traps will do for these, when there is no probability of a fox coming. When you plant for the marten separately, pour a few drops of the tincture of valerian upon the moulds which lie on the trap, and let the bait be a jay or pigeon fastened behind it.

To trap a fox in a field, plant three traps in a triangle, heads outwards, by the side of a field ; two in the furrow where you have balled him ; he is sure to return the third night, if not sooner. Cut a hare or rabbit open, and stake it down in the centre ; then begin to draw the bait about two yards from it on one side. Take

a large circle, and come the same distance on the other side ; there take your drag up. When he comes either way, this will cause him to check, and throw at the bait, when he will be taken. Your drag may be a sheep's paunch, or as before. A rat, in a water furrow, the water standing two inches deep, fastened on a stake, with a trap at each end, will do.

The following method has been practised with good success : let the party employed go round and carefully search for their earthing places, wherever they are, and make the mouths of them quite fine with mould ; then come again the next morning, and observe whether the earth has been trampled on, and if he sees the prints of his feet tending outward and inward, he may then be assured he is safe within his hole or earth ; on which let him take a good strong hay-net, such as are used in some warrens, pitched all round at a proper distance, put the sticks slightly into the ground, that as soon as he strikes the net, it may fall upon and entangle him ; but if placed tight, he will tumble over, and by that means escape. Another caution is necessary : when he has set the net, he must put some bells in three or four different places, that he may hear when he strikes the net ; then run in upon him and keep him entangled, otherwise he will get out again, and seizing him by the back part of his neck, muzzle him and tie his fore legs together, that he may not scratch his muzzle off.

To trap him at earth, level the moulds at the entries with a stick, any time in the day ; go the next morning,

and you will see if he has been out or in. If he is in, pass your traps in as far as will admit their springing ; heal them properly, then get some sticks and arch the hole over ; lay sods upon them till the hole is quite darkened. As he approaches carelessly till the light appears, he will be in the trap before he is aware of it.

To poison cubs, pass some arsenic, with plenty of beaten glass in it, into young rooks, young rabbits, rats, entrails cut in lengths, &c., and throw them into the covers near their earths.

To poison the old dog and vixen, where you see their ball and billot in fields, lay some balls, made of broiled sheep's liver shredded fine, and mixed with goose grease, honey, corrosive sublimate, and ground glass. This will disperse quickly in their stomachs, and prevent their throwing it up.

If you wish to take cubs alive, pitfall them at the mouths of the earths, or dig them. You will often find them in rabbits' burrows, where they are easily dug out ; tie a piece of net on the end of a stick, to draw them with ; shove it against them, and they will snap at it, and entangle their teeth, when you must twist it round, and draw, having a sack ready to receive them.

Among the artifices of foxes are, the vixen leaving her cubs when they can run, going a little way from the earth, and lying down, waiting to see if they will venture out to follow her ; if they do, she returns and most cruelly worries them, being aware of the danger to which they expose themselves. They rob badgers of

their earths, by leaving their billot and urine at their entrances. The latter, being more cleanly, leave them the filthy habitation. Rabbits they rob by frightening them away. When they are after their prey, in cover, they lie down close in the runs where game come to their feed, and throw on to them. When at feed they roll and creep about, till within throw, at which they are very dexterous. In dark nights, they *look* poultry down ; their eyes being like small balls of fire, make the fowls reach their heads down till they fall.

THE POLECAT.

PLANT traps by the sides of warm sunny hedges, with a leveret or young rabbit hung over the bridge rather more than its length, so as to make the polecats jump, when they will drop into the trap ; or make little arches, a yard long, at the corners of the posts of gates or stiles, turn them as the fence goes, through which they will be sure to turn, seeing the light appear from the other side. Plant your trap in the centre. The following is another method of destroying them : at night, after your fowls are gone to roost, sift some sand before every little hole you suspect they may come in at, and look at them again in the morning early before the fowls are moving, and you will soon discern the prints of their feet ; then set a common hutch-trap, baited with a piece of fowl or small bird of any kind ; hang the bait on the nail over the

bridge, as before observed, and if you should catch one of them, remember to make the print of his feet in the sand, which will enable you to know it better another time. If you have not a hutch-trap, put at the place where you have tracked him a small steel trap, and place a brick on each side, so that he cannot avoid coming over the trap, which must be covered carefully with fine mould. Do this in the afternoon; then cover it with a thin board, that the fowls may not spring it in going to roost; then take the board or shelter away, and go in the morning before the fowls move, and if you should not catch him the first night, observe the same method for a few nights more, and you will be sure of him.

THE STOAT.

IN all chicken-gardens and pheasantries, two or more hutch or box traps should always remain set under the walls or pales, baited with any small bird or chicken, or with rabbits' and fowls' entrails. Let the traps be placed on the outside, close under the walls or pales, with the back part against them; make a wing or low paling, about eighteen inches high, with old pales, or form a small hedge, about the same height, from each end of the trap, extending four or five yards aslant, and about two or three yards open at the end from the wall, which will be a guide for stoats to enter into the trap, for they like to run under such places; and unless

prevented in proper time by the method here laid down, they will enter and destroy great numbers of rabbits, pheasants, and poultry, in one night. In most warrens, therefore, it is generally customary to have traps constantly set and baited, otherwise there would soon not be any rabbits left. In hare-warrens likewise, hutch or box traps should be placed in divers parts of the warren, with the two ends painted white, and rubbed over with the entrails of any animal, which will prevent the hares from entering it, but allure the vermin. Let them be always baited in the same manner as before directed, and if you find they come to your hen-houses, use the same method, and they will naturally come into the trap and be caught; should you not have a hutch trap, set a small steel trap in the same manner as for the polecat.

THE WEASEL.

WHEN you have discovered that a weasel has destroyed your chickens, or sucked the eggs, get a hutch or box trap, and bait it with a small bird or egg; and if you should be at a loss to know at which place he enters, make some shrapes either with sand or fine mould: and when you have discovered which way he comes, place some steel traps.

THE MOLE.

THIS animal is in some places, but more particularly in the north of England, called a Want, and contrary to the habits of most other vermin, lives chiefly underground, doing great mischief in gardens, &c. When you find moles come, observe the outsides for their angle or run; or if there is a path in a field, it is very probable that they have a run across it; or they will frequently have one at a gateway. These are what are called the main runs, about two or three inches under the earth, and may easily be found by turning up the earth, along which they will run ten times in a day. When you have discovered one of these runs, you must tread in the earth tight, and when you come that way again, see whether it is as you left it; if you perceive the mole has been along, then set a trap, by which means several may be caught in an afternoon, these being their main roads out of one part of the ground to the other; it will be of little use to set a trap in any other angles or runs. In the spring, when they run near the surface of the earth, they make a great many different angles in search of worms, on which, and chaffers, they chiefly feed.

If they make hills in your fields or garden, take notice of the places before mentioned, and set a trap in the following manner. Take a piece of board half an

inch thick, four inches and a half long, by two and a half wide, and put a small hoop or bow at each end, with just room for the mole to go through; in the centre, at each side, put two small pegs, in order to keep him in the trap; for sometimes one that is shy, when he finds the peg before him that springs the trap, will turn out at the side, spring the trap, and not be taken; it is necessary therefore to use these small pegs, which will keep the mole in the straight road, placed as before directed.

In the next place, get two strong horsehairs or pieces of small wire, and in the centre or middle of the bow, at each end, make a hole to put the hair or wire through double, then open the hair or wire just to fit and lie close inside of the bow like a noose; get some fine mould, and make it moist, like paste, and work some of it with your finger and thumb all round the inside of the bow, so that the horsehair or wire may not be seen. Through the hole in the centre of the trap let a short bit of string come. Put a forked peg tight in the hole, that may keep the string from slipping through, till the mole, by going through, pushes it out; then the string slips up. When you have thus prepared the trap, open one of these runs, exactly the length of the trap, put it down in the run quite level, and make it smooth, that there may be no light discovered. Then take three good strong hooked pegs, two on one side, and one on the other, and stick them down tight; then procure a good stiff stick, about four

feet long, stick one end in the ground tight, bring the other end down to the trap, and hitch it in a loop, that comes from the hair or wire, and it is set. When the mole comes, he pushes out this little peg, the string draws out, the bow-stick flies up, and the mole is caught. In the spring, when you catch a she mole, rub her back part about the bows and the inside of the traps. Observe, when you have caught all that you perceive to move, you need only look round the outside of your fields, and keep some traps constantly going there, and they will lay hold of them as they come in and out. If you put some dead moles in the runs it will prevent their coming, and keep your grounds free from these troublesome vermin.

BUZZARDS, KITES, HAWKS, ETC.

THE large black eagle buzzards frequent parks and warrens, and often catch leverets, young rabbits, and pheasants, or any thing else that moves, as soon as the morning light approaches, for they are very early birds. In winter-time set a steel trap, bait it with the entrails of rabbits or fowls; in the spring, bait with the skin of a young rabbit, stuffed, and tied to the bridge; but after the young rabbits begin to run about, sometimes the birds are shy, and will not strike, unless they see them run. The steel traps for these vermin should strike seven or eight inches high, in order to clear the

bait, otherwise the jaws might only catch the bait and miss the vermin.

The grey bob-tailed buzzard or puttock is of much the same nature as the former, hunting parks and warrens, for the destruction of rabbits and pheasants, going in search of them when the morning light appears. It is smaller than the eagle-buzzard, which is its only difference from that bird. You may catch it with the steel trap before described, baited with the entrails of fowls or rabbits, or with some of the pieces of rabbits which may have been accidentally killed. It is to be caught easiest in winter time, for then it haunts one place for a month together in a warren, and at that season it is short or destitute of food.

The large forked-tail kite is the largest and heaviest bird of the hawk kind in England, but not near so fierce as the eagle-buzzard, being rather of a sluggish and indolent disposition, not caring much to hunt after prey; but when the other kites and hawks have killed any birds, it comes upon them, and beats them away, and then devours the birds themselves. These birds chiefly dwell in woods and desert places, and frequent the sides of rivers and brooks, being fond of fish, and often eat the tails of the fishes which the otter has left. You may catch them by setting two traps in the same manner as you do for the buzzard; bait them with a piece of fish, if you have it, or with a rat, or the entrails of fowls or rabbits; and when once you discover the places

they haunt, you may catch them with the greatest facility.

The large blue Sherard kites frequent forests, heaths, and other lonesome places, but especially bogs and marshy grounds, where they destroy great numbers of snipes, to which they are the worst enemy of any birds of prey of the hawk kind. They beat all over the bog with the greatest regularity and exactness, till they find them lying ; for the nature of the snipe is, if they perceive their enemy in the pursuit, to lie as close to the ground as possible, when the kite strikes directly upon them.

These vermin are very remarkable for one particular : if ever you observe any of them coming in the morning, you will be certain to see them return the same way back in the afternoon ; and three or four succeeding mornings they will have the same beat, if they are not disturbed. Whenever, therefore, you see one go in the morning, get a trap set ready against his return, baited with a rabbit's skin, stuffed and put on the bridge of the trap, but remember to cover the trap carefully with moss : if you set it in a green sward, then cover it with grass, by which means they are generally taken.

The blue Sherard hawk in many respects resembles the blue kite last described, and may be taken in the same way.

The large brown white-rump ring-tailed hawk is the most pernicious and mischievous hawk that flies ; especially in destroying the partridge, which it takes not so

much by swift flying, as by the following stratagem : when he finds a covey, and springs them, he flies after them as fast as he is able, and continues keeping them on the wing till they are too much exhausted to be able to make their escape.

The small ring-tailed hawk is the largest of the sparrow-hawk kind, and is a very fierce and pernicious bird, destroying chickens and young ducks, in yards, &c., about farm-houses. In the fields, it kills blackbirds and thrushes ; and in the winter season, fieldfares and other small birds fall a prey to it.

The sparrow-hawk is seldom known to destroy chickens or any other kind of poultry, unless driven by the greatest extremity of hunger ; birds which fly wild in the fields are chiefly the prey of this little hawk. It may be caught in the same way as the others.

Ravens and crows you may take best by laying a joint of flesh in the centre of two furrows, drawn across each other, in the middle of a field. Plant the traps, one about four inches from the bait, another about a yard ; as they walk up the furrows they will be taken. Single wire springes laid in the furrows, with one side turned up a little, will take them by the legs. Eggs dropped singly about the land, with two or three clods set up to plant traps between ; or half an egg-shell stuck on the bridge of a trap, with moist clay, and put just under water, at the edges of ponds ; or one put in a three-fanged stick, and set up in the water with the

trap before it, the water being a little too deep for them to go to it, they will set their feet upon the bridge to reach it.

To poison them, lay the ribs of a horse in the arm of a naked tree, about the middle of a cover; chop some flesh, entrails, &c., and mix plenty of *nux vomica* with it.

To have sport with magpies, where you see them feed, make little twists of white paper, open at the top, wide enough to admit the head. Lime the inside edges, pass them into the ground with a dibble, then drop a small piece of flesh into each; when they pop their heads in they will become hoodwinked, and fly almost out of sight, then drop down, and so on. Pigeons may be taken in the same way, with brown paper, and two or three peas dropped into each. This is to be done where they feed.

To take herons, (being great enemies in fisheries,) take a small roach, or very small eel; put it upon an eel-hook with a line; lay it in the water, where it is about six inches deep: fasten the line to the side. A few of these, laid where they frequent, will not fail of success.

Calls for vermin, quails, rails, &c., may be had of the bird-fanciers in London. Crying like a hare will bring ravens, crows, magpies, jays, hawks, &c.; and crying like a rabbit, will bring polecats, stoats, &c., from the rabbits' holds, which is easy to do with the mouth.

PART THE NINTH.

TECHNICAL TERMS USED IN SPORTING.

OF pointers, setters, spaniels, greyhounds, and terriers, two are called a brace, and three a leash ; of hounds, beagles, &c. ; two are called a couple, thrèe a harle, or couple and half ; of spaniels and terriers, more than two brace of different kinds are called a tue, or rough muster : several brace of spaniels are called a pack. In some counties it is common to say a couple of spaniels.

Blood-hounds and greyhounds when tired, are said to be overhauled. Pointers, setters, spaniels, terriers, &c., floored or jaded. Spaniels quest, tongue, and babble on the haunt. When setters and pointers open, they are said to vick or lapise. The foxhounds challenge on drag or kennel, and hit him off. The harriers call on trail or form, and make their way. When they overshoot and are at fault, they are said, when trying back, to traverse. When the fox or hare is dying, they run mute, and set their sterns and hackle up. This is the time when horsemen are flung out, not having the cry to lead them to the death.

When quadruped animals of the venery or hunting kind are at rest, the stag is said to be harboured, the buck lodged, the fox kennelled, the badger earthed, the otter vented or watched, the wild boar couched : the squirrel is at dray, the hare formed, the rabbit set, and the marten-cat treed.

When you find and rouse up the stag and buck, then they are said to be emprimed: unkennel the fox, then he is on the pad; dig the badger, unvent the otter, uncouch the wild boar, untree the squirrel and marten-cat, start the hare, bolt the rabbit. To investigate, or follow by the prints of the feet is a great qualification in a sportsman. They are called the slot, or view of deer, of all kind. You may know when they have been coursed, by the cleft widening, and the dew-claws printing the ground; if an old one, by his gait, *i. e.* manner of walking or straining, which latter is at full speed: he does not overreach as young ones do. The seal of an otter; the ball of a fox; the pricks of a hare; the prints of a badger, &c; scratching of rabbits. Of pheasants, grouse, partridges, quails, and rails, the rode; of woodcocks and snipes, the creeps: the traces of all, in the snow. The excrement or ordure is called the suage of an otter, the fumet or furnishings of deer, the billot of a fox, the fiants of a badger, the lesses of a wild boar, the buttons or croteys of the hare and rabbit, the spraints of the marten-cat, &c.; the droppings of pheasants, partridges, &c.; chalkings and markings of woodcocks; and mutings of snipes. The tail is called the pole, potter, or eel of an otter; the single of deer, the brush of a fox; the white tip, the chape; the stump of a badger; the wreath of wild swine; the brush of the squirrel and marten-cat; the scut of the hare and rabbit; the drag of polecats, stoats, &c.; the train or pole of the pheasant.

When the feathered tribe are at rest, the grouse are said to be challenged; the pheasants chucked or perched; partridges jugged; quails piped; rails craked; woodcocks fallen; snipes at walk. When in search, spring grouse, pheasants, and rails; flush partridges, woodcocks, quails, and snipes, when they are said to be on the wing. In your beat, in the early part of the season,—you find a pack of grouse, a nide of pheasants, a covey of birds, a bevy of quails, a fall of woodcocks, a walk of snipes; rails, hares, &c., singly. Often you find from ten to fourteen brace of birds in one covey; the cause is the birds nesting near each other, by which means the young ones get together, and one bird takes more than belongs to her, which is called robbing.

When animals of the quadruped kind are inclined to copulate, the following phrases are used.

FEMALES—The roe or hind, go to tourn.—Doe, to rut, or rutting.—Wolf, to match, or make, or making.—Otter, to her kind.—Vixen, to clicket, or is clicketing.—Wild Sow, to brim, or is brimming.—Goat, to rut, or is rutting.—Hare, to clicket, or is clicketing.—Rabbit, to buck, or is bucking.—Badger, to brim, or is brimming.—Bitch, is in heat, or getting fond.—Polecat, Stoat, Ferret, &c., are bucking.

MALES—The Stag or Hart, bellows.—Buck, groans, or troats.—Wolf, howls.—Otter, whines.—Fox, barks.—

•Boar, freams.—Goat, rattles.—Hare, beats or taps.—Rabbit, ditto.—Badger, yells.—Pole-cat, Stoat, Ferret, &c., chatter.

A Cote—is when a dog passes his fellow, takes in, obstructs his sight, and turns the hare.

A Form—where a hare has set.

At Gaze—looking steadfastly at any object when standing still.

A Layer—where a stag or buck has lodged.

Beat Counter—backwards.

Bend—forming a serpentine figure.

Blemishes—when they make short entries, and return.

Blink—to leave the point or back, run away at the report of the gun, &c.

Break field—to enter before you.

Chap—to catch with the mouth.

Curvet—to throw.

Doucets—the testicles or stones.

Embossed—tired.

Flourish—to twist the stern, and throw right and left in too great a hurry.

Going to Fault—a hare's going to ground.

Handicap—To match dogs.

Hard-nosed—having little or no sense of smelling.

Hug—to run close side by side.

In-and-In—too near related, as sire and daughter, dam and son, &c.

Inchipin or Pudding—the fat gut.

Jerk—an attempt to turn, by skipping out.

Lapise—to open or give tongue.

Mort—the death of deer.

Near-scented—not catching the scent till too near.

Plod—to hang upon the tragonings or doublings.

Run Riot—to run at the whole herd.

Sink—to lie down, cunningly drawing the feet close, and bearing the nose on the ground, to prevent the scent flying.

Skirt—to run round the sides, being too fond of the hedges.

Slip—losing the foot.

Speans or Deals—the teats.

Spent—when the deer is nearly dead, which you may know by his stretching his neck out straight.

Straineth—when at full speed.

Tappish—to lurk, skulk, and sink.

To Carry or Hod—when the earth sticks to their feet.

Tragoning—crossing and doubling.

Trip—to force by you.

Tuel—the vent.

Twist—a sudden turn of the head, when the scent is caught sidewise.

Vick—to make a low noise.

Watch—to attend to the other dog, not endeavouring to find his own game, but lying off for advantages. In coursing it is called running cunning.

Wiles or Toils—are engines to take deer with.

Wrench—a half-turn.

COLOURS AND MARKS OF DOGS.

A FRIEZE down the face, a white square on any part of the body, is called a ticket; white round the neck is called a garter; single spots are called ticks; small ones (confused), are called mottle; single ones patches; a liver patch white, ditto mottle, ditto tick, black patch white, ditto yellow, pale ditto, a black tan, beagle-eyed. Whole colours are, black, white, lemon, yellow, whey-coloured, dark brindled, brown, &c.

Hounds are grizzled, brindled, badger-pied, &c., which colours are indicative of strength. The hair on their backs, which rises, is called the hackle; the tail the stern. In breeding this kind of dogs, their tongues should be studied, as well as good make and shape. By the depth the flew of the jaw hangs, you may in a great measure judge of the depth of their tongues. For sweetness of cry, your kennel should be composed of different kinds, as follows: large dogs, that have deep and solemn mouths, swift in spending, to bear the bass in concert; then a double number of roaring and loud-ringing mouths, these bear the counter-tenor; then some hollow plain sweet mouths, to bear the middle part: these, with a couple or two of small singing beagles, to bear the treble warble, will make the cry complete. They will not hang off, but pack well, each being enchanted by the melody*.

* This is a fancy sketch of Mr. John Mayer.

PART THE TENTH : RECIPES.

To Destroy Rats.

ONE pound of flour of malt, three drops of oil of rhodium, two ounces of loaf sugar, eight cloves, and a tablespoonful of caraway seeds, all beat fine in a mortar. Lay it in small parcels where they frequent, three or four nights, till they eat it freely; then add prepared arsenic, and set water in different places, with some infused into it. To prepare the arsenic, pour spirit of salt on it till it dissolves. When it is thus managed, it will not make them sneeze, which is the cause of their refusing to eat it. You will often find their runs in banks very thick: cut little benders, dip them in treacle and meal mixed with the poison; pass them into the holes, leaving the bottoms clear; this will stick on their backs, and they will lick it off. When you trap them, use only the feed; plant the traps amongst it, putting two or three drops of musk on the bridge of each trap. This will cause them to be taken by the head, which will prevent their crying to alarm the others.

For Trapping Woodlarks and Nightingales.

Your bait must be meal-worms, which may be found under mangers in stables, where the mulch has

not been disturbed for some years. You may breed them in meal, in which they must be kept. These birds are taken with a spring trap, which covers them with a net.

Food for them.

For the nightingale, fresh lean meat, cut small, and ants' eggs mixed. For woodlarks, paste made with white pease-meal, eggs, fresh butter, and honey, slowly fried in an iron pan, till it becomes crisp; put the butter in first, then the eggs, and stir them, then the meal and honey; keep stirring them all the time. For canaries, when moulting, foreign poppy seed, with boiled eggs and crumbled bread mixed.

Rheumatism in Dogs

May be discovered by its local affection, and sometimes by a swelling in the neck, loins, or legs. Oppose the first attack, and never suffer an animal to go into the field when affected with the disease, or with cold. Warm lodging, and two or three days' indulgence near a good fire, with a dose or two of calomel, will generally cure a first attack. Also, a warm bath for a quarter of an hour, the dog being afterwards rubbed dry, and put to bed warm: which may be frequently repeated, if necessary.

To raise a perspiration, give forty or fifty drops of laudanum, and two teaspoonfuls of spirit of ammonia, or hartshorn, in warm beer, or cordial. Rub the parts

affected two or three times a day, with the following mixture: oil of turpentine, two ounces; spirit of harts-horn, two ounces; laudanum, two drachms; sweet oil, two ounces: the whole well mixed together.

To make a Dog inclined to Copulate.

Give him, in warm sugared milk, seven drops of cantharides; the same quantity for a bitch.

When a Dog is seized with a Hovering in the Lights.

Give him half a drachm of asafœtida, every other night, well mixed in lard or butter.

Mange

Is generally occasioned by neglect, or want of cleanliness; and not unfrequently from the want of a sufficiency of nourishing food. In this case, external applications, and nourishing food, are the best remedies; but if it arise from repletion or surfeit, calomel and the most powerful alteratives are required. Then take Æthiop's mineral, one ounce; cream of tartar, one ounce; nitre, two drachms: divide the whole, when mixed, into sixteen, twenty, or twenty-four doses, according to the size of the dog, and give one dose every morning and evening: but when weakness or poor living occasions this disorder, sulphur in their drink will be sufficient, with an occa-

sional purge, should it be necessary, of an ounce or upwards of salts, or two or three spoonfuls of salts, or two or three spoonfuls of syrup of buckthorn, rubbing them with a mercurial unction. Care must be taken not to salivate the animal, and he must not be permitted to lick himself, or to catch cold ; either of which may be fatal.

In a slight case, brimstone and hog's lard may effect a cure ; or you may apply the following : roll brimstone powdered, four ounces ; powdered foxglove, two ounces ; sal-ammoniac powdered, half an ounce ; Barbadoes aloes, one drachm ; turpentine, half an ounce ; lard, six or eight ounces ; mix them. Ointments are too apt to be smeared over the hair, without being applied to the skin. It requires at least two hours to dress a dog thoroughly : the hair should be parted almost hair by hair, and a small quantity of ointment should be rubbed actually on the skin, between the parted hairs, by means of the end of the finger. After every part is done, the hair may be smoothed down ; and if the operation has been neatly performed, the dog will scarcely show any marks of it. After three or four such dressings with the last-named ointment, the dog may be washed with soft-soap and water, and the ointment again applied when dry ; which is to be repeated till the cure is complete. The dog must be kept muzzled, and be warmly lodged and carefully kept from taking cold during this operation. The same ointment may also be applied to eruptions, or canker in the ear.

To Cure the Red Taint or Mange.

Anoint with black sulphur, train-oil, and a little tar; give him internally half an ounce of sulphur and a quarter of an ounce of liver of antimony, in lard or honey. The latter is best.

To make a Dog fine in his Skin.

Give him a tablespoonful of tar, in oatmeal, made into a ball.

To Destroy Worms.

Take from ten to thirty grains of calomel, in a paste ball, made with butter and flour; and the next morning two drachms of socotrine aloes, in butter.

Another.

Give the yolk of an egg, with two scruples of saffron in it. Let the dog fast till the next morning.

Another.

Give as much ground glass, finely powdered, as will lie on a shilling, in lard or butter. This must be repeated, and the glass should be very fine.

Distemper in Dogs.

Changes in the atmosphere, low keep, and neglect, are among the principal causes of this disease. The following are the usual symptoms of this malady in young dogs: sudden loss of spirit, activity, and appetite; drowsiness, dulness of the eyes, and lying at length with the nose to the ground; coldness of the extremities, of the ears and legs, with heat of the head and body, sometimes nearly scorching; sudden emaciation and excessive weakness, particularly in the hinder quarters, which begin to sink and drag after the animal; the flanks pinched in; an apparent tendency to evacuate from the bowels a little at a time; sometimes vomiting; the eyes and nose are often, but not always, affected with a discharge. In an advanced stage of the distemper, spasmodic and convulsive twitchings will be perceived, with giddiness, turning round, foaming at the mouth, and fits, which would probably terminate in madness. In this stage of the disease recourse must be had to professional aid, or the animal be put out of existence. In distemper, the dog will probably refuse food for some days, and should be supplied with warm milk and water, broth, gruel, or whey; he should be also taken out into the air; his bed should be warm and dry; and in cold weather he should be permitted to lie by the fire, in a moderate degree. Mild doses, of from two to three grains of calomel, should be given daily in milk, for four

or five days, with intermissions: this will reduce the fever, and bring the bowels to their natural state. James's powder is generally a certain remedy; or antimonial powder and calomel, three parts of the former and one of the latter, may be given, from eight to fifteen grains, with the same effect. It should be made into balls about the size of a hazel nut, with treacle or honey, and flour; and rubbed slightly over with fresh butter or lard. A tablespoonful or two of castor oil may be given occasionally; sometimes a teaspoonful of powdered rhubarb, with two or three grains of calomel, have been highly useful. Mercury or antimony should be first given in very small quantities, increasing the doses according to the nature of the case, and the constitution of the patient. Mr. Blane's Distemper Remedy, with which directions are sold, will be found highly beneficial.

To recover the dog from the debility left by distemper, and the remedies necessarily given to cure it, light flesh meat, and rich broths of beef or neat's feet, and milk broth with rice, should be given: balls of slack-boiled beef bruised to a pulp, in a mortar, are very nourishing. Beer cordial, with ginger, moderately sweetened, is very useful. Strengthening medicines generally given, are from twelve to forty drops of laudanum in a glass of port or good beer; or in a large teaspoonful of friar's balsam; and four teaspoonfuls of water, given once or twice a day for a week. Bark and port wine have been found highly useful; from one to two drachms of the bark given at a time. These

medicines should not be given till the bowels have been cleared and the fever reduced. During the disease, the discharge from the nose and eyes should be wiped away as often as possible, and the bed kept dry and clean. When taken out for air, the dog should be encouraged to eat grass, and to lap in running water.

When a vomit is necessary in distemper or any other disease, a teaspoonful or a tablespoonful of common salt, in a teacupful of warm water, will produce one; or tartar emetic may be given, from one to four grains.

Another Way to Cure the Distemper.

Give from four to seven grains turbith mineral, in boiled liver, shredded fine, and beat: this to be repeated. Put a seton behind each ear, to prevent its seizing the cap of the brain: give him plenty of warm broth, and keep him in the dry. If the inside of the tuel should make an external appearance, which often happens at two or three months old, boil one ounce of logwood, cut small, in a quart of milk, till it is reduced one-fourth; strain it off, and give a teacupful every morning, till it disappears. Or two ounces of dragon's blood pulverized, and a piece of alum the size of a walnut, boiled in three pints of skimmed milk, till reduced to a quart. A teacupful of this to be given every day*.

* As any thing that holds out a hope of succour in this formidable disease merits trial, it is here stated that Mr. Coate's Distemper Balls have been pronounced of extraordinary excellence by many high authorities.

Worms.

When dogs are subject to these, their coats will stand up, and their appetite be excessive, without producing any improvement in the appearance of the animal ; the belly will be hard, and sometimes swollen, accompanied by a short husky cough. A purge of the usual quantity of fine aloes, with from two to eight grains of calomel, should be given them, and two or three days after begin a regular course of worm medicines. Take the finest tin filings, two drachms ; cowhage, half a drachm ; calomel, fourteen grains ; to make four, six, or eight balls, according to the size and strength of the dog ; give one every morning for a fortnight, with occasional omissions if necessary : let the dog's food and lodging be good in the interim. Or one or two large spoonfuls of linseed oil, with a teaspoonful of oil of turpentine given every morning fasting for a week, will sometimes effect a cure. Or give walnut leaves boiled in milk.

Wounds.

Friar's balsam is an excellent application for a fresh wound. Or a spoonful of brandy and a few drops of laudanum may be applied. Thorns and splinters must be carefully got out, and either of the above applied immediately. A poultice or black pitch plaster is the best application to extract thorns. Tincture of myrrh, or aloes, is sometimes preferable to friar's balsam for a wound in its early stage, as the latter generally closes the wound too soon.

For a Green Wound.

Hogs' lard, turpentine, and bees' wax, equal quantities, and a quarter of the quantity of verdigris: these are to be all simmered over a slow fire till they come to a salve.

To cure a Dog of the Mange, without Scent.

Dissolve a quarter of an ounce of sublimate in one ounce of spirit of salts: boil it in a quart of water, and wash the parts affected. Muzzle the dog. This repeated, will effect a cure.

Purges.

Rue, beat fine, and put into lard or butter-milk, is a good purge.

From five to seven grains of calomel is a good purge and purifier.

But the best purgative is socotrine or fine aloes, from half a drachm to a drachm for a small dog, and two or three drachms for a full sized hound: inclose the powder in a ball of flour and lard, or butter.

When a Dog strips in his Feet.

Wash and soak them well in bran and warm water, with a little vinegar; then apply tincture of myrrh; and in the morning, previous to his going out, anoint them with a little fresh butter or sweet oil. Do the same under his arms, flanks, &c., where he strips.

Sore Feet.

Butter-milk, greasy pot-liquor, or water-gruel, are the best remedies to apply to dogs' feet that have become sore from travelling, or the hardness of the ground: some apply brine, but this is apt to inflame them if used before the feet are healed. The dog should be kept at home, or his feet be wrapped up till they are healed; when brine and vinegar may be applied to harden them.

To cure the External Canker in the Ear.

Pulverize a piece of alum, the size of a large walnut; boil it in half a pint of water; clean the scabs of the ear, and apply it with a large piece of sponge, as hot as possible: hold the sponge on till cool. Repeat it two or three times each day, till it is cured. Butter of antimony, diluted in milk, till it is the thickness of cream, will cure it.

Or half an ounce of red precipitate, finely levigated, and made into an ointment with two ounces of hogs' lard.

Canker in the Ear.

A mixture of soap and brandy, to be poured into the ear, and well rubbed into the external parts; it may be diluted with one-third water, if necessary. Particular care must be taken to protect the dog's eyes.

To cure the Internal Canker in the Ear.

Put a seton in the neck, just under the ear; and with a piece of sponge on the end of a pliable stick clean out the ear, using a little soft-soap. When it is quite clean, then dip the sponge into copperas water, and pass it in, turning it gently round. To make the copperas water, beat a piece the size of a large nut, and put it into an ounce phial, filled with spring water: shake it well when you are going to use it. Make the seton with horsehair and tow, cased with hogs' lard: pass it through with a red-hot iron; tie a piece of silk to each end to move it by.

When a Swelling arises after Bleeding.

Apply a fomentation of camomile flowers.

Dogs may be blooded in the jugular or neck vein; one, two, or even eight ounces in some cases, may be taken from them.

For the Canker in the Teeth.

In cases of sufficient importance, rub a moist tooth-brush on a piece of blue-stone vitriol, or burnt alum, and rub the teeth well; which, on repetition, will eat it off.

For Films over the Eyes, Clouds, &c.

Pulverize a piece of blue-stone vitriol, the size of a pea; put it into an ounce phial filled with spring water; wash the eyes with it, letting a little pass in. This, repeated, will soon effect a cure: or a little scuttle-bone blown into the eye every other morning.

For an Old Wound or Sore.

Hogs' lard and honey, of each half a pound; turpentine, a quarter of a pound; pulverized verdigris, two ounces: let them be simmered over a slow fire, and the ointment applied hot. Five grains of calomel should be given occasionally, in the form of a bolus.

When the Distemper hangs in a Dog's Kidneys.

Give him a wineglassful of antimonial wine, with a teaspoonful of spirits of turpentine in it; which, being repeated, will strengthen him.

To Prevent the Distemper.

Inoculate puppies when they are a fortnight old, with the cow-pox. Make the incision inside the arm.

Another.

Keep sulphur in the water, give occasional purges, with exercise, and free access to dog-grass.

For a Strain.

One ounce of spirits of turpentine, half a pint of old beer, and half a pint of brine. Bathe the part affected, and repeat it if required. Or, one ounce of sal-ammoniac and one pint of vinegar : keep the dog quiet.

When a Dog looks heavy and sleepy in cold Weather.

Give him old beer, sugared, and toasted bread crumbled into it. To be given quite warm.

Swelled Seats.

Rub with a pomade, composed of camphorated spirit, or brandy and goose grease, two or three times a day.

For a Bruise in the Joint.

Oil of turpentine.—To be well rubbed in.

To prevent Hydrophobia, or Canine Madness.

As soon as possible after the bite is received, well wash the part: apply salt, squeeze the incision, and bind as much salt on it as you can, stopping the circulation above it. Keep the dog tied up.

When a Dog is Poisoned.

Give him a tea-cupful of castor oil. After he has vomited well, continue pouring olive oil down his throat, and rubbing his belly.

Torn Ears.

Ears torn in the hedges, or by other means, may be touched with laudanum and brandy, and alternately with oil.

When a Dog staggers, and falls down in a Fit.

This generally happens in hot weather. If there is water at hand throw him into it; or he may be let blood in the mouth, by passing a knife or phlebotomy across two or three bars next the teeth. This, however, will never happen, if the blood be kept in a proper state.

Bilious Complaints in Dogs.

These are occasioned by high living and want of exercise. The best remedy is a good dose of calomel; but in obstinate cases a strong dog may take turbit mineral, or yellow mercury, from six to twelve grains, in a pill or ball.

Food for Greyhounds when Training.

Take wheat-meal, and oat ditto, equal quantities, liquorice, aniseeds, and whites of eggs ; beat them into a paste, make loaves, and bake them : they are to be broken and given in rich broth.

Fleas.

Constant cleanliness is the best preventive. Lather the coat well all over, and through to the skin, with the strongest soap ; adding pearl-ash, if necessary ; taking care to kill all the fleas within reach : then wash clean. This, repeated a dozen times, will exterminate them.

Or an ounce of pepper, boiled in a quart of water, is a good wash to rid dogs of these vermin ; but Scotch snuff, steeped in gin, is infallible.

To Cure the Skins of Dogs, Foxes, Fawns, Cats, &c.

In casing these animals, begin at the muzzle, and from the pelt downwards, when they are to be stuffed.

Let alum be beaten fine, and put into boiling water, or boiled in the water with a little salt, in the proportion of one pound to two gallons. Put the skins into a tub, and cover them with the water when it is lukewarm. Let them stand four days ; then take them out and rub them well the way the hair lies, with lukewarm water

and bran, (the bran had better be strained off,) then take them out, and extend them upon boards with nails, and put them out to dry.

How to Administer Medicines to Dogs.

Place the dog upright on his hind legs, between the knees of a seated person, with his back inwards: a very small dog may be taken altogether into the lap: place a napkin round his shoulders, bringing it forward over the fore legs, by which he may be secured from resisting. The mouth being now forced open by the pressure of the fore finger and thumb, upon the lip of the upper jaw, the medicine may be conveniently introduced with the other hand, and passed sufficiently far into the throat to insure its not being returned. The mouth must now be closed, and kept so till the medicine is seen to pass down. When the animal is too strong to be managed by one person, an assistant is requisite to hold open the mouth; which, if the dog is very refractory, is best effected by a strong piece of tape, applied behind the holders, or fangs of each jaw: a ball or bolus must be passed completely over the root of the tongue, and dexterously pushed some way backwards and downwards. When a liquid is given, if the quantity is more than can be swallowed at once, it must be removed from the mouth each deglutition, or the dog may be strangled. The head should be completely secured, and a little elevated, to prevent the

liquid from running out. Soft, or nauseous balls, should be wrapped in thin paper; tasteless medicines, calomel, &c., or purging salts, may frequently be given in food.

To Case-harden Locks.

Take the plate, hammer, cock, and screw, put them into an iron hardening pan, with burnt soles of shoes; set them into a coal fire, blow it up, and continue laying small pieces of deal round and on it, for about an hour. Cease to blow the fire after the pan is hot. Have a dish of water to receive them, when taken out of the fire, which must be instantaneous, pan and all, as the air getting to them will prevent the marl colour.

To Colour the Steel Fittings of a Gun.

Clean them well with fine emery-paper, hold them over embers till they turn blue; have a piece of sponge dipped in olive oil ready to pass over them the instant they are out of the fire. Repeat it till they are a good blue colour.

To bring the Grain up in Gun-Stocks, &c.

Hold the gun-stock over a lighted paper, then with a fine file rub it off, repeating it till it comes to your mind. If any sap arises, apply aquafortis and rose-pink mixed; burn it in slowly, then file it again, and rub it well with pulverized pumice-stone in a rag, till it has a good face. The following mixture may be constantly used: spirit of turpentine, bees' wax, and alkanet-root,

simmered over the fire till it has the consistence of soft salve. This, applied with a piece of woollen, will give a beautiful gloss to gun-stocks, furniture, &c.

*To Preserve Gun-barrels from Rust, occasioned
by Salt Water.*

Three ounces of black-lead, half a pound of hogs' lard, and a quarter of an ounce of camphor, boiled over a slow fire: the barrels to be rubbed with this mixture, which, after three days, must be wiped off with a linen cloth. This process need not be repeated above twice in the winter.

To Colour Gun-Barrels.

One ounce of blue-stone vitriol, dissolved in a tea-cupful of warm water, six ounces sweet spirit of nitre, and one ounce tincture of steel (such as creates rust); put these into nearly half a pint of spring water: well shake it, and it is fit for use. Let the barrel be properly cleaned, with a buff strap, or fine emery paper. A little unslacked lime will take the oil or grease off; then take equal quantities of spirit of salt, aquafortis, and water; shake it well, and rub the barrel with it; let it stand till next day: this is called pickling. Then apply the mixture with a piece of soft rag; let it stand one day, and rub it with a superfine steel scratch-brush, repeating it till it comes to your mind. Wash the barrel over with boiling water, and apply a little sweet oil with alkanet.

To render Boots Waterproof.

Drying oil, one pint; yellow wax, two ounces; turpentine, two ounces; Burgundy pitch, one ounce: melt them over a slow fire, and add a few drachms of essential oil of lavender or thyme; brush the boots with this in the sun, or at a short distance from the fire. The application to be repeated as often as the boots become dry, until they are fully saturated. This is the method recommended by Colonel Hawker. The late Dr. Harward recommended the following process: for new boots take half a pound of bees' wax, one quarter of a pound of resin, and the same quantity of mutton suet or tallow: boil them together, and anoint the boot well with the preparation, lukewarm. Should the boots have been worn, substitute beef suet in the place of the mutton or tallow.

A 8

D

D 8

APPENDIX.

A GENERAL epitome of the Game Laws, as at present in force, is almost as necessary an instrument for servants in sporting capacities as any other article used in their craft. Still, however abridged, it could not be brought within the limits of an appendix to a work of this nature, the utmost extent that it will permit being a brief notice of the most important changes that have been recently effected. With this intent, it is my purpose to confine myself to cases of daily occurrence, applying the law to that which is constantly arising in the course of a sporting servant's duty. Ten years ago the Game Laws, in all their complexity, were better known than they are now in their simplified form—because it requires a lapse of long extent to infuse into the general mind any code of laws, however plain and condensed. With this slight preface, and requesting allowance will be made for the difficulty of making notices, necessarily curtailed, sufficiently comprehensive to be useful, we will at once proceed with our object.

By Stat. 1 and 2 William IV.^a c. 32, sec. 12, "The lord or steward of the crown of any manor, lordship, or royalty, may appoint one *or more* keepers to preserve or kill the game within the limits of such manor." A material alteration, as under the old law the power only extended to a single deputation.

^a Commonly called "The Recent Game Act."

By the new law, "all game is made *property*, and full power is given to the owners of such property, as well lords of manors as any person having the right to kill game upon such land, by virtue of any reservation or otherwise ; or for the occupier of such land, (whether there shall or shall not be any such right by reservation or otherwise,) *or for any gamekeeper or servant of either of them* ; or for any person acting by the order or in aid of any of them, to demand the game from the person having it, and to take it from him if he refuse to give it up, for the use of the person entitled to the game, upon such land, forest, park, chase, or warren." (Sec. 36.) The only modifying clause being, "that it appear to have been recently killed." This authority, however, is strictly limited to *game*.

TRESPASS.—"Every gamekeeper, or servant of any person having the right to kill the game, or the occupier of the land, or his servants, may require every trespasser in pursuit of game, or woodcocks, snipes, quails, landrails, or conies, to quit the land where he shall be found, and to tell his Christian name, surname, and place of abode ; and in the event of his refusal, or giving a false or general description of himself, to apprehend and take him before a justice of the peace, to be fined." (Sec. 31.)

Keepers of lords of manors have no authority to kill game except upon the land of which the lord is owner, or where the game belongs to him, as on commons or wastes, under the statute, or where it may be reserved to him out of any lease, or where he has a right of free warren. (Sec. 6.)

"A gamekeeper, appointed for any manor, lordship, or royalty, may take from any unqualified, that is, uncertificated persons, all such dogs, nets, and other engines and instruments, for the killing or taking of game, as shall be *used* within the limits of his right or authority." (Sec. 13.)

By the statute as regards trespass, an exception in favour of hunting or coursing is made, so long as the trespasser is in *fresh* pursuit of any deer, hare, or fox ; but this right does not extend so far as to enable any one to beat for a hare, but only to pursue it when started in other land, when the courser has found it. (Sec. 35.)

An appeal to the Quarter Sessions is given against any conviction for trespass ; and there is a proviso in the act, that any person charged with trespass shall be at liberty to prove, by way of defence, any matter, which would have been a defence to any action at law for such a trespass. (Sec. 30.)

By a very general error, it is supposed that the game belongs in all cases to the tenant, under the late act, and that he can permit or discharge any one from killing it. That a tenant or occupier may warn persons in ordinary cases off his land there can be no question ; but if for the purpose of killing game under the authority of the landlord (by virtue of the 7th section of the Act) they go upon the land, the tenant cannot interfere ; if he could, the landlord's right would be defeated. On the other hand, where any lessor or landlord has the right to the game, in exclusion of the tenant, the tenant is liable to a penalty for killing it, or permitting any other person to do so, without the landlord's authority. (Sec. 12.)^a

DECOYS.—As these ponds are maintained at great cost and trouble, the law looks upon them as property engaged in trade, and affords the same protection to the proprietor of a decoy that it does to an individual occupied in any calling of skill or industry.

^a As the extent of the privilege of free warren is not generally known, it may be well to state, that it is confined to the hare, the rabbit, the pheasant, and the partridge.

Persons are not only liable as trespassers for entering a decoy, and killing the fowl, but an action lies for discharging guns adjacent to it, whereby the fowl are driven away, and the owner damnified. (*Keeble v. Hickeringall*, 11 East, 573.)

A man has a right, however, to set up a decoy on his own ground, notwithstanding it is near to his neighbour's land. (*Per Holt*, C. J., c. 7, 11 East, 576.)

FISHING AND FISHERIES.—Unlike game, fish become the property of him who first captures them; but, notwithstanding they are his as soon as taken, he may be subject to an action at law, or other proceeding, for the manner in which they came into his possession.

Besides this liability under the common law, a person *now* taking or destroying fish in any water running in or through any land adjoining or belonging to the dwelling-house of any one owning the water, or having the right of fishing therein, is guilty of a misdemeanour: and if any person take or destroy, or attempt to take or destroy, any fish in any water (*not* being such as before mentioned) but which is private property, or in which there is private right of fishing, he is liable to pay, on conviction before a magistrate, beyond the value of the fish, a penalty not exceeding £5 (7th and 8th Geo. IV. c. 29, s. 34, 35).

An act passed in the same year (7th and 8th Geo. IV. c. 30, s. 15), “ subjects to seven years’ transportation, or imprisonment not exceeding two years, every one who breaks down or destroys the dam of any fish-pond, or any water which shall be private property, or in which there shall be any private right of fishing; *or who shall put any line or noxious ingredient into the water with intent to destroy the fish.*” It is important especially to notice this latter sta-

tute, as its enactments are new, and consequently are not found in any but recent works relating to fish and fisheries.

In conclusion, I have to allude to a very prevalent impression, that all persons are qualified to *angle* anywhere with impunity. It is a perfectly erroneous idea, originating, most probably, in the fact that many proprietors of waters, who object to trolling, casting, or trimmering, offer no opposition to fair bottom-fishing. It is, however, a pure matter of clemency, as this, as well as every other description of fishing, can be practised as of right or toleration only.—
EDITOR, Sixth Edition.

The subjoined may be found of service to the game-keeper :—

By an Act passed on the 10th of July, 1817, for the Prevention of persons going armed by night for the destruction of game, the Act 56th Geo. III. cap. 130, also the Acts of 39th and 40th Geo. III. cap. 50, relating to rogues and vagabonds, are repealed; and in lieu thereof it is enacted, “That if any person or persons, having entered into any forest, chase, park, wood, plantation, close, or other open or inclosed ground, with the intent, *illegally*, to destroy, take, or kill game or rabbits, shall be found at night, that is to say, between the hours of six in the evening and seven in the morning, from 1st October to 1st February; between seven in the evening and five in the morning from 1st February to 1st April; and between nine in the evening and four in the morning for the remainder of the year; armed with any gun, cross-bow, fire-arms, bludgeon, or any other offensive weapon; every such person so offending, being thereof lawfully convicted, shall be adjudged guilty of a misdemeanour, and shall be sentenced to transportation for seven years, or shall receive such punishment as may by law be inflicted on persons guilty of misdemeanour, and as the Court, before which such offenders may be tried and convicted, shall adjudge.”

And by 13 Geo. III. c. 55, s. 2, “No person shall *kill, destroy, carry, sell, buy, or have in his possession, heath-fowl*, commonly

called *black-game*, between the 10th day of *December* and the 20th day of *August*; nor any *grouse*, commonly called *red-game*, between the 10th day of *December* and the 12th day of *August*; nor any *bustard*, between the 1st day of *March* and the 1st day of *September*, in any year, upon pain of forfeiting, for the *first offence*, a sum not exceeding £20 nor less than £10, and for the *second and every subsequent offence* a sum not exceeding £30 nor less than £20, one moiety thereof to go to the informer, and the other moiety to the poor of the parish; and in case the penalty be not paid, and there be no distress to be had, the offender may be committed to prison, to be kept to hard labour for any time not exceeding six nor less than three months."

By 23 Eliz. c. 10, s. 2 and 5, it is enacted, that no person, of whatever estate, degree, or condition, shall take or destroy any *pheasants* or *partridges* in the night-time, upon pain of forfeiting 20s. for every pheasant, and 10s. for every partridge.

And by 9 Anne, c. 25, s. 3, if any person whatsoever shall take or kill any *hare*, *pheasant*, *partridge*, *moor-game*, *heath-game*, or *grouse* in the night-time, he shall, on conviction before a justice, forfeit the sum of £5, one-half to go to the informer, and one-half to the poor of the parish, to be levied by distress, or for want of distress, to be sent to the house of correction for *three months* for the *first offence*, and *four months* for every *after offence*.—These penalties, however, being thought insufficient, by 13 Geo. III. c. 80, s. 1, it is further provided, that if any person shall kill, take, or destroy any hare, pheasant, partridge, moor-game, or heath-game, or use any dog, snare, net, or other engine, with an intent to take, kill or destroy the same in the night-time, viz. between seven o'clock at night and six in the morning, from the 12th of October to the 12th of February, and between nine o'clock at night and four in the morning, from the 12th of February to the 12th of October, such person being convicted, upon the oath of one witness, before one justice, shall forfeit for the first offence a sum not exceeding £20, nor less than £10; and for the second, a sum not exceeding £30, nor less than £20; one moiety thereof to be paid to the informer, and the other moiety to the poor of the parish.

By 14 and 15 Hen. VIII. c. 10, it is enacted, that no person, of whatever estate, degree, or condition they may be, shall trace and kill any hare in the snow, on penalty of 6s. 8*d.* for each hare.

And by 1 Jac. I. c. 27, whoever shall trace or course any hare in the snow, shall on conviction before two justices, by confession, or oath of two witnesses, be committed to jail for three months, unless he pay to the churchwardens, for the use of the poor, the sum of 20*s.* for every hare he shall so take or destroy; or shall, after one month after his commitment, become bound with two sureties in 20*l.* a-piece, before two justices, not to offend in like manner.

It is also by the same act provided, that every person, who shall at any time take or destroy any hares with hare-pipes, cards, or with any such instruments, or other engines, shall, on conviction before two justices, by confession, or oath of two witnesses, suffer the like penalties.

And by 22 and 23 Car. II. c. 25, s. 6, if any person be found setting or using any snares, hare-pipes, or other like engine, and shall be thereof convicted, by confession, or oath of one witness before one justice, within a month after the offence committed, he shall give to the party injured such satisfaction as the justice shall appoint, and pay down immediately to the overseers, for the use of the poor, a sum not exceeding 10*s.*, or else shall be committed to the house of correction for a time not exceeding one month.

And by 1 Jac. I. c. 57, s. 2, any person, who shall take the eggs of any pheasant or partridge, or swan, out of the nest, or wilfully break, spoil, or destroy the same in the nest, shall, on conviction before two justices, by confession, or oath of two witnesses, be committed to jail for three months, unless he pay on conviction, to the churchwardens for the use of the poor, 20*s.* for every egg; or, within one month thereafter, become bound, with two sureties in 20*l.* each, not to offend again in like manner.

THE LAWS OF COURSING.

THE following Rules and Regulations for the better guidance of all Coursing Societies, were agreed to at a general meeting of noblemen and gentlemen assembled at the Thatched House, in St. James's Street, London, on Saturday, the 30th of June, 1838, and recommended for adoption by all Coursing Clubs in England, Scotland, and Ireland. The Earl of Stradbroke in the Chair.

GENERAL RULES.

1. Two stewards to be appointed by the members at dinner each day, to act in the field the following day, and to preside at dinner. They are to regulate the plan of beating the ground, under the sanction of the owner or occupier of the soil.
2. That the time of putting the first brace of dogs in the slips shall be declared at dinner on the day preceding. If a prize is to be run for, and only one dog is ready, he shall run a bye, and his owner shall receive forfeit; should neither be ready, the course shall be run when the committee shall think fit. In a match, if only one dog be ready, his owner shall receive forfeit.

3. The judge ought to be in a position where he can see the dogs leave the slips, and to decide by the colour of the dogs to a person appointed for that purpose ; his decision to be final.
4. The judge shall not answer any questions put to him regarding a course, unless such questions are asked by the committee.
5. If any member make an observation in the hearing of the judge respecting a course during the time of running, or before he should have delivered his judgment, he shall forfeit one sovereign to the fund, and if either dog be his own, he shall lose the course. If he impugn the decision of the judge, he shall forfeit two sovereigns.
6. That all courses run at this Society shall be from slips.
7. That no person shall run a greyhound by a name different from that in which he has appeared in public, without first giving notice of such alteration, under a penalty of five sovereigns.
8. That any member of this Society, or other person, running a greyhound at the meeting, having a dog at large which shall join in the course then running, shal forfeit one sovereign ; and if belonging to either of the parties running, the course shall be decided against him.
9. No greyhounds to be entered as puppies, unless born on or after the 1st of January of the year preceding the day of running.
10. If, in running for prizes, the judge shall be of opinion that the course has not been of sufficient length to enable him to decide as to the merits of the dogs, he

shall inquire of the committee whether he is to decide the course or not ; if in the negative, the dogs must be immediately put again into the slips.

11. When a course of an average length is so equally divided that the judge is unable to decide it, the owners of the dogs may toss for it ; but if either refuse, the dogs must be again put in the slips, at such time as the committee may think fit ; but if either dog be drawn, the winning dog shall not be obliged to run again.
12. In running a match, the judge may declare the course to be undecided.
13. If a member shall enter more than one greyhound, *bonâ fide* his own property, for a prize, his dogs shall not run together, if it be possible to avoid it ; and if two greyhounds, the property of the same member, remain in to the last tie, he may run it out, or draw either, as he shall think fit.
14. If a greyhound stand still in a course when a hare is in his or her sight, the owner shall lose the course ; but if a greyhound drop from exhaustion, and it shall be the opinion of the judge that the merit up to the time of falling was greatly in his or her favour, then the judge shall have power to award the course to the greyhound so falling, if he think fit.
15. Should two hares be on foot, and the dogs separate before reaching the hare slipped at, the course shall be undecided, and shall be run over again at such time as the committee shall think fit, unless the owners of the dogs agree to toss for it, or to draw one dog.

16. A course shall end if the dogs are unsighted from any impediment, after being fairly in with their hare.
 17. If any member or his servant ride over his opponent's dog when running, so as to injure him in the course, the dog so ridden over shall be deemed to win the course.
 18. When dogs engaged are of the same colour, they shall each wear a collar.
 19. It is recommended to all union meetings to appoint a committee of five, consisting of members of different clubs, to determine all difficulties and cases of doubt.
-

LOCAL RULES.

1. That the number of members shall be regulated by the letters in the alphabet, and that the two junior members shall take the letters X and Z, if required.
2. That the members shall be elected by ballot, that seven members constitute a ballot, and that two black balls shall exclude.
3. That the name of every person proposed to be balloted for as a member shall be placed over the chimney-piece one day before the ballot can take place.
4. That no proposition can be balloted for, unless put up over the chimney-piece, with the names of the proposer and seconder, at or before dinner preceding the day of the ballot, and read to the members at such dinner.

5. That every member shall, at each meeting, run a greyhound his own property, or forfeit a sovereign to the Club.
6. No member shall be allowed to match more than two greyhounds in the first class, under a penalty of two sovereigns to the fund, unless such member has been drawn or run out for the prizes, in which case he shall be allowed to run three dogs in the first class.
7. If any member shall absent himself two seasons without sending his subscription, he shall be deemed out of the Society, and another chosen in his place.
8. That no greyhound shall be allowed to start, if any arrears are due to this Society from the owner.
9. That any member, lending another a greyhound for the purpose of saving his forfeit (excepting by consent of the members present), shall forfeit five sovereigns.
10. Any member, running the dog of a stranger in a match, shall cause the name of the owner to be inserted after his own name in the list, under the penalty of one sovereign.
11. No stranger to be admitted into the Society's room, unless introduced by a member, who is to place the name of his friend over the chimney-piece, with his own attached to it, and no member to introduce more than one friend.
12. That the members of the Clubs shall be honorary members of this Society ; and, when present, shall be allowed to run their greyhounds, on paying the annual subscription.

13. That Messrs. (three or five members, including the secretary for the time being) shall form a committee for managing the affairs of this Society, and that they shall name a person, for the approbation of the members, to judge all courses run in this Society, and that all doubtful cases shall be referred to them.
14. That this Society shall meet on the in ,
and course on the following days.
- 15 That the General Rules be recommended for the adoption of all Coursing Societies, and the Local Rules applied in all cases where they shall be practicable and convenient.

BOOKS PUBLISHED BY
SIMPKIN, MARSHALL, AND CO.

BLAINE.—OUTLINES of the VETERINARY ART; or a Treatise on the Anatomy, Physiology, and Curative Treatment of the Diseases of the Horse, and of Neat Cattle and Sheep, with Surgical and Anatomical Plates. By DELABERE BLAINE. Fifth Edition, revised and enlarged by the introduction of many new and important subjects. 8vo, 1*l.* 1*s.*, cloth lettered.

BLAINE.—CANINE PATHOLOGY ; or a Description of the Diseases of Dogs, nosologically arranged, with their Causes, Symptoms, and Curative Treatment; preceded by a sketch of the Natural History of the Dog; with practical directions on the Breeding, Rearing, and Salutary Treatment of these Animals. Fourth Edition, revised, corrected, and enlarged. By DELABERE BLAINE. 8vo, 9*s.*, cloth lettered.

CLATER.—EVERY MAN HIS OWN FARRIER ; containing the Causes, Symptoms, and most approved Methods of Cure of the Diseases of Horses and Dogs. By FRANCIS CLATER and his Son JOHN CLATER. Twenty-eighth Edition. Edited and revised by an Eminent Practitioner. 12mo, 6*s.*, cloth.

CLATER.—EVERY MAN HIS OWN CATTLE DOCTOR ; containing the Causes, Symptoms, and Treatment of all the Diseases incident to Oxen, Sheep, Swine, Poultry and Rabbits. By FRANCIS CLATER. Ninth Edition, revised and enlarged. 12mo, 6*s.*, cloth.

NEEDHAM.— THE COMPLETE SPORTSMAN ; containing a compendious view of the Ancient and Modern Chase. A concise History of the various kinds of Dogs used in the Sports of the Field, and also of the Quadrupeds and Birds which are the objects of pursuit. The method of Training and Breeding Hounds, Greyhounds, Setters, Pointers, &c. The Diseases of Dogs with the Method of Cure. Shooting; with particular instructions, wherein the Art of Shooting Flying is reduced to practical certainty. The choice of a Fowling-piece, Powder, Shot, &c. The Ancient Forest and Game Laws. The Modern Game Laws explained, with every Instruction and Information relative to the Diversions of the Field. By T. H. NEEDHAM. 12mo, 7*s.*, cloth.

WHITE'S (JAS.) COMPENDIUM of CATTLE MEDICINE; or, PRACTICAL OBSERVATIONS on the DISORDERS of CATTLE and the other Domestic Animals, except the Horse. By JAMES WHITE. Sixth Edition, re-arranged, with copious Additions and Notes, by W. C. SPOONER. 8vo, 9s., cloth lettered.

WHITE'S FARRIERY.—A COMPENDIUM of the VETERINARY ART: containing Plain Observations on the Construction and Management of the Stable; a brief Outline of the Structure and Economy of the Horse; the Nature, Symptoms, and Treatment of the Diseases and Accidents to which the Horse is liable; with Advice to the Purchasers of Horses, and a Materia Medica and Pharmacopœia. By JAMES WHITE. Seventeenth Edition, entirely reconstructed, with additions and alterations, bringing the work up to the present state of Veterinary Science. By W. C. SPOONER. With a coloured Frontispiece of the Foot and Leg of the Horse, and numerous Engravings on Wood, by Branston. 8vo, 16s., cloth lettered.

COMPLETE CORRESPONDENT (The), consisting of Original Letters, adapted to every Age and Situation in life, together with various forms of business and compliment, and the best directions for Writing Letters with Ease, Elegance, and Correctness. To which are added, Specimens of Real Correspondence, from the best Writers in the English Language, and Translations from the Latin and French. 12mo, 2s. 6d., roan lettered; 2s., sewed.

COLLINS.—THE PERFECT READY RECKONER in MINIATURE; containing Tables accurately cast up for the use of all who deal by Wholesale or Retail; exhibiting the Amount or Value of any number or quantity of Goods or Merchandize at 199 various prices, from One Farthing to One Pound; with various Tables of Interest, Commission, Annuities, &c., with the addition of a Comparative Table of Weights and Measures of England and France. By THOMAS COLLINS. 64mo, 1s. 6d., cloth.

GUY.—A POCKET CYCLOPÆDIA; or, Epitome of Universal Knowledge; designed for Young Persons in general, containing Useful Information on numerous Subjects necessary to be known by all Persons. By JOSEPH GUY, Author of the "*New British Spelling Book*," &c. Eleventh Edition, enlarged, extensively improved, and illustrated with Cuts. 12mo, 10s. 6d., cloth.

**RETURN
TO →**

CIRCULATION DEPARTMENT
202 Main Library

2

3

5

6

Books may be Renewed by calling 642-3405.

JAN 09 1989

~~AUTO. DISC.~~

~~JAN 10 1989~~

CIRCULATION

UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CA 94720

FORM NO. DD6

YB 10248

M313019

U.C. BERKELEY LIBRARIES

0006771276