

SPORTSMAN.



J. S. SKINNER,
former Editor of the American Farmer.

WITH ILLUSTRATIONS.

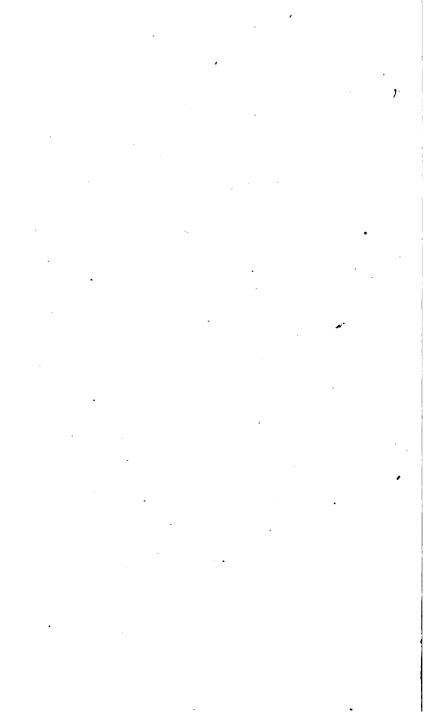
PHILADEL PHIA.

LEA & BLANCHARD.

1845.



THE SETTER.



THE DOG

AND

THE SPORTSMAN.

RMBRACING

THE USES, BREEDING, TRAINING, DISEASES, ETC., ETC.,

OF DOGS,

AND AN ACCOUNT OF

THE DIFFERENT KINDS OF GAME,

WITH THEIR HABITS.

ALSO

HINTS TO SHOOTERS,
WITH VARIOUS USEFUL RECIPES, ETC., ETC.

BY J. S. SKINNER,



LEA & BLANCHARD.

1845.

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PREFACE.

The work here offered, contains, it is believed, the first separate and regular treatise which has been published in this country on the kindred subjects, the Dog, Game, and the Gun; a portion being devoted to diseases of the Dog,—an animal which, for sagacity and usefulness combined, deserves to stand alongside of the Horse, in the front rank of domestic animals, if we consider how much of healthful and pleasant recreation, as well as security of property, we owe to his docility and vigilance,—virtues which have won for him affection and praise from illustrious men in all ages. For if "Argus" died of joy at the return of Ulysses, did not a "Boatswain" equally rejoice in the friendship of Byron? Had not Cowper his "Beau" for a companion, and has not Scott immortalized the name of Maida? and, coming

down to yet later times, and to men no less distinguished, who, it may be asked, has read that delightful book, "The Life of Lord Chancellor Eldon," can fail to be struck with its numerous anecdotes, illustrative of his amiable fondness for dogs? How interesting his simple story of the loss, and of the curious incidents connected with the recovery of "Pincher!" for whom he offered a reward of five pounds sterling, and "would sooner have lost a thousand pounds, than to have lost him in that way!" And then, how affecting the story of his beloved son in his last moments, calling him back to his bedside to say,—" Father, you will take care of poor Pincher,"for whom, it finally appears, the Lord Chancellor in his will bequeathed as follows:--" To my favourite dog an annuity of eight pounds, during life, to provide food for the said dog."

PÉRFACE.

Where, in a word, let us ask, has man been found, in the depths of the wilderness, or in cities "proud with spires and turrets crowned," that the dog was not at his side, all instinct with devotion to him and his family, and ready to expose his life in their defence? Snuffing the loafer in the tainted breeze, and wakeful to the most stealthy approaches of the midnight robber, he gives instant warning to his master to come on; while, with all his native ferocity and recklessness of danger, he flies himself at the felon's throat? Shame, shame! then, let us cry, on the man, if man he may be called, who can bear, unmoved, to see a friend so faithful, a servant

so submissive, falling an untimely victim to disease, without wishing to know by what appliance he may be relieved! And yet how often do we see high-bred and valuable dogs devoured by mange, or broken down by distemper, when a single dose of appropriate medicine, as herein prescribed, would relieve and restore them!

The author has aimed to make this work complete and acceptable, by the addition of brief instructions and maxims for breeding, feeding, and breaking dogs of the few families most in use in our country,—such as the Pointer, Setter, Fox-Hound, the Water-Dog, the Terrier, and the Shepherd's Dog. These hints are taken from the writings of himself or friends, in the early volumes of the *Turf Register*, a fountain from which he felt at liberty to draw the more freely as it was opened by himself; while he as freely admits how much it has been improved in the keeping of its present Editor, commonly yelep'd "The Tall Son of York."

The spirited sketches of the nature and habits of the Pheasant, Quail or Partridge, the Woodcock, Grouse, and Snipe, were furnished for another purpose by the accomplished head of the Topographical Bureau, Col. A., and we hope he will excuse us for thus using them, and for making this public acknowledgment of our appreciation of the merits and good taste of what he considered trifles thrown off to fill up an idle hour.

In turning over, once more, the leaves of that old volume, and associating, as only the editor can do, the

real name and character of the various writers, with their anonymous contributions, what pleasing, though sometimes mournful, reminiscences are awakened. Sixteen years have made sad havoc in the ranks of friends and coadjutors, as distinguished for learning, scholarship, wit, honour and all gentlemanly qualities, as ever volunteered to help along a new and doubtful literary enterprise.

When one thinks of the various fortune and fate of those who then sent each his mite to the common feast; how time has destroyed some and scattered those whom it has spared, it brings to remembrance, the answer of the "old man" to the congratulations of the Princess of Abyssinia, on the pleasures which an evening walk must give to a man of his age and learning. "Lady," answered he, "let the gay and the vigorous expect pleasure in their excursions, it is enough that age can obtain ease; to me the world has lost its novelty: I look round and see what I remember to have seen in happier days. I rest against a tree, and consider that in the same shade I once disputed upon the annual overflow of the Nile, with a friend who is now silent in the grave. I cast my eyes upwards, fix them on the changing moon, and think with pain on the vicissitudes of life."

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THE DOG.

CHAPTER I.

BREEDING, FEEDING AND LODGING.

Recall the traveller, whose altered form
Has borne the buffet of the mountain storm;
And who will first his fond impatience meet?
His faithful dog 's already at his feet!
Yes; though the porter spurn him from the door,
Though all that knew him know his face no more,
His faithful dog shall tell his joy to each
With that mute eloquence which passeth speech.
ROGERS.

Does, in common with all domestic animals, require crossing after the second generation. This is the more necessary in the case of domesticated animals, because, otherwise, the work of procreation would often be effected by those of inferior physical and spiritual endowments, and degeneracy would naturally follow; an evil less apt to occur among animals in their wild state, because there the favours of the female are fought for with mortal fierceness, and are generally engrossed by the most spirited and powerful. Hence no striking and general

deterioration takes place. The lion, the bear, the wolf, the tiger, and the deer, are the same now, in colour, form, size and vigour, that they have ever been. The male which this year establishes and monopolises, each to himself, his harem, or his particular mate, by sheer superiority of courage and strength combined, is generally obliged to yield his envied privileges, the ensuing season, to others who follow him, in the vigour of youth, with higher physical capacity; so that nature herself provides against too much breeding "in and in" and the deteriorating consequences of incestuous intercourse! But where animals have come under subjection to social uses, and the art of man, it becomes necessary to manage the business of procreation with the greatest skill, having the strictest reference to those finer qualities in the parent which it is desired shall predominate in the progeny. It was great tact and perseverance in this department which, in England, won enviable renown for Bakewell, Ellman, and the Collingses, and other eminent breeders of sheep and cattle. The following hints on the breeding and feeding of dogs were derived by the Editor, chiefly from his late lamented friend. Doctor Smith, of the U. S. A., the accomplished authority elsewhere relied on and referred to.

In crossing, difference of form should be carefully observed. Colour is of little consequence, if we except the ease with which the eye can detect one more than another in covered grounds; and hence, for field sports, white should predominate when it is practicable. The pups of a well trained slut, and one that has been hunted during the greater part of gestation, are,—cæteris paribus,—better than others. A deep sympathy exists between the parent and her offspring, and, although to

us mysterious, yet nature speaks intelligibly; and we should not be indifferent to her admonitions. Care should be taken to prevent, especially in the first season of sexual passion, any dog of inferior, or different blood, from having access to the slut. An extraordinary case of what is, we believe, termed superfætation, once occurred with a beautiful coach-dog slut, Annette, sent to the editor by the late much esteemed Gorham Parsons. of Byfield, (then of Brighton, Mass.) Her virgin embraces were yielded to the stealthy solicitations of a large coarsely formed white dog, with black ears; and, in every succeeding litter, though all else were like herself, and her paramour, Lubin; to wit: leopardlike. beautifully spotted, there was always one pup marked with his black ears, and otherwise resembling the beastly dog to which she was first, accidentally prostituted. was also remarked by Mr. Parsons that, in every litter of the dam of these dogs there was one born deaf.

A more remarkable instance of the effect of imagination, and the passion of love, with dogs, is related by the late Doctor Hugh Smith of England. As he was travelling from Midhurst into Hampshire, the dogs, as usual, in country places, ran out barking as he was passing through the village; and amongst them he observed a little ugly cur that was particularly eager to ingratiate himself with a setter bitch that accompanied him. While stopping to water his horse, he remarked how amorous the cur continued, and how courteous the setter continued to her admirer. Provoked to see a creature of Dido's high blood so obsequious to such mean addresses, the Doctor drew one of his pistols, and shot the cur. He then had the bitch carried on horseback for several miles. From that day, however, she lost her

20 THE DOG.

appetite; ate little or nothing; had no inclination to go abroad with her master, or to attend to his call; but seemed to pine like a creature in love, and express sensible concern for the loss of her gallant. Partridge season came: but Dido had no nose. Sometime after she was put to a setter of great excellence, which had, with great difficulty, been procured for the purpose; yet not a puppy did Dido bring forth which was not the picture and colour of the cur that the Doctor had, many months before destroyed; and, in many subsequent litters Dido never produced a whelp that was not exactly similar to the unfortunate cur already mentioned.

When selecting a pup consult the form. If the father be esteemed the better of the two parents, choose after his points even should the colour resemble the mother, and vice versa.

It is taken for granted that no reflecting sportsman will rear a dog, whose pedigree he has not full assurance was perfectly free from all impurity; but, whether Pointer or Setter, the blood should be exclusively confined to their respective classes, devoid of any mixture, or cross, the one with the other! When a choice has been made, remove the pup from the mother as soon as it will lap milk freely. This will prevent infantine disease of the skin, so readily induced by numbers combating together in a crowded and too frequently a dirty kennel. I have many times, says Dr. S., seen blotches contracted from this cause, which were difficult to remove, and some of them ultimating in mange.

Food and Lodging.—These contribute, largely to future health and usefulness. Vegetable food should preponderate until an age is acquired when the dog is to take the field. After three months a small quantity of well-

boiled fresh meat, once a day, will generally prevent worms. But a solid meat diet will create plethora, a bountiful source of membranous diseases of the mouth and nose, mange, distemper and madness. Boiled Indian corn meal is the best, and cheapest vegetable we can use. Bones are destructive to the teeth, and contain little nutriment. I have, (then 1831,) two Pointers, now ten years of age. One of them was given me when five years old. The other I reared myself. The given dog has no teeth above the gums: the other has a full and perfect set. This great advantage has been obtained by a proper attention to the selection of his food. After mature age (fifteen months), a generous daily allowance of beef, boiled with vegetables, (potatoes, beans and cabbage,) will be advisable. These articles, always at command, are cheap and wholesome; and will be eaten freely. They keep the bowels soluble, prevent worms, prolapsi and piles. On days of sporting, a little raw meat before "going out" will be better than a full meal of the usual aliments. Full feeding, after the exercises of the day, will never be omitted by a just master. Mutton, for obvious reasons, should never be given to any dog, even if it could be procured free of cost.

An ample, weather-proof board house, having a movable top, with hay, straw or shavings, as a bed, should constitute the only lodging. Even during cold weather sleeping in dwelling houses, or any approach to fires, must be prohibited. The bed litter should be renewed frequently, and the kennel whitewashed within and without, quarterly.

No man deserves to have a good dog who will not be mindful of his comfort as well as his health. A good

substantial kennel may be built at a very trifling expense; large enough for as many dogs, as any gentleman in this country ought to keep—even for five or six couple of hounds. The rules laid down by Somerville, as to situation and exposure for the kennel are worthy of attention.

"Upon some little eminence erect,
And fronting to the ruddy dawn; its courts
On either hand, wide opening to receive
The suns all cheering beams, when mild he shines
And gilds the mountain tops."

And again he says-

"O'er all let cleanliness preside, no scraps
Bestrew the pavement, and no half-pick'd bones
To kindle fierce debate, or to disgust
That nicer sense, on which the sportsman's hope
And all his future triumphs must depend."

I knew, adds Doctor S., a noble, well-trained Pointer destroyed in his fourth year by permitting him to lay on a hearth rug, before a fire, during the winter. Early in March he was on the marshes, after snipe; and by reason of his tenderness, contracted a regular intermittent, which continued till midsummer. Under one of the paroxysms he was pursued and slain as a mad dog, by ruffians who were unworthy to clean his kennel; and that too in spite of benevolent and earnest protestations of his innocence by a friendly neighbour.

There is a strong tendency in the skins of all young dogs to disease, requiring particular counteracting attentions; the most certain of which consist in ablution with warm soap suds, followed by the use of a fine comb. This washing and combing, often repeated, during the first six months, is attended with astonishing

benefits, which continue through life. During this early period no personal familiarities are required, beyond an occasional caress.

The period of gestation with the bitch is sixty-three days; and her pups are whelped and remain blind ten days. The question has been much mooted among naturalists whether the wolf is, or is not, the original type of the canis familiaris, or domestic dog. It is not the design of these mere notes to go into a discussion of that question.

CHAPTER II.

THE POINTER AND SETTER.

"See how the well-taught Setter leads the way,
The scent grows warm; he stops; he springs the prey;
The fluttering coveys from the stubble rise,
And on swift wing divide the sounding skies.
The scattering lead pursues the certain sight;
And death, in thunder, overtakes their flight,"

Sporting books and journals abound in essays and instructions on the training and use of these high-spirited and intellectual branches of the canine family. We shall adopt, chiefly, in what we are about to say of them the advice and maxims of a friend, who begins with suggesting, that for a well-bred dog, (and no true sportsman will knowingly, trouble himself with any other,) the only breaking necessary, in the beginning, is to make him obey. After that his education is to be acquired by exercise in the field; and, of this, the Pointer, and yet more the Setter and the Fox hound, cannot well have too much.

The very first lesson to be taught a young dog, and what should be deemed a sine qua non, is absolute prohibition against springing up and resting the feet against the person. Much perseverance and patience will be required to prevent this bad habit, and yet preserve,

between master and dog, a proper degree of kindness and respect. But, patience will do it, in every case, and the result will save to both, much serious vexation.

The young dog is generally taught to fetch; and this is most easily done at from six to ten months old; and, in some cases, even much sooner. Some sportsmen, however, prefer to omit this lesson in their instructions; contending that by being taught to fetch dead game, he becomes apt to "break shot," and flush the remaining birds.

We should, however, prefer to have him taught to fetch; and the plan recommended is to cover a bone with a cloth, which prevents him from biting it, while it retains a scent which enables him to find, and induces him to take hold of it. Then, by throwing it from you, he begins to play with and fetch it; and this may be eventually taught as a lesson, and enforced as a duty. You may now proceed to command him to fetch dead birds, without the danger of his mouthing them, as is generally the case when they are taught to fetch a soft substance. The pointing of a dead bird is not deemed necessary.

The best way to teach a dog to "come in," and which may be done in a few lessons, is to attach to his collar a cord of about twenty feet, which prevents him from running away, and which he should be induced to attempt, to prove to him the difficulty of escape, and break him to come in under the whip; at the same time studying his disposition, and chastising him in moderation. When a dog is thus far broken the greatest difficulty is over. His education is to be finished in the field by killing game over him.

The most simple words are to be used; and, as on

ship-board, as few as possible. Such as "hie away," when desired to go on. "Take care," "gently," "softly boy," when he seems excited, and too eager on the scent. "Toho," in a strong full voice, when he is on a point, as a caution to him to be steady. And, when far off, hold up the hand; and, in case he flushes his bird, he should be sharply spoken to, or slightly whipped. "Hold up," when the dog is raking, or running with his nose to the ground, on a scent. The dog which carries his head highest will always find the most game, to say nothing of finding it in the handsomest style.

"Down charge" for him to lie down, wherever he is, when the gun is discharged. Strict obedience in this is absolutely required. "Hie fetch" is the command to look for the dead bird. "To heel" when you would have the dog walk behind you; and, finally, the words "come in" when he is near; or a whistle when at a distance.

Instant attention to a call or whistle should be engrafted on his very nature, so that the slightest indifference to it should be deemed an audacity and receive commensurate punishment.

A dog should be taught to hunt to the right and left, and to quarter his ground, by a wave of the hand in the direction you wish him to go; and generally be hunted against the wind; but a well-bred dog will generally do so without any intimation from his master.

If when birds are found, any change of situation is made by the finding dog, it is certain that the birds are on foot; and any advance at that juncture will be premature. A few moments' patience at that time will enable the whole quarry to be embodied, procuring a fine flush. The birds in their flight from this position, thus brought

together, will be more compact, take a similar direction to cover; and more of them can, consequently be recovered in a shorter space of time. At the moment of rise, as the object is not quantity, but sport, select a single bird for the first shot, and the nearest after that for the second barrel. As soon as the firing ceases apply the call instantly, and exclaim, with determined energy, "down charge;" and, without moving, calmly reload. If there is any motion it must be exclusively to enforce the command of down charge. A glance of the eye will discover whither the covey have taken refuge.

It is a maxim in hunting never to allow a dog to run ahead of another in a point, but either make him back, or come in to heel. Besides the danger of flushing your game, it would be permitting an unfair advantage to be taken of the dog doing his duty in the lead, of both which a dog of nice sensibility will show himself to be conscious.

It happened, some years since, that a party was out, near Old Point Comfort, in Virginia, with a fine Pointer belonging to Mr. A.—. A small Terrier had accompanied them, and whenever the Pointer would take his stand, the Terrier would rush by him, and put up the birds. Repeating this vexatious, ungentlemanly conduct several times, the Pointer was seen to grow impatient. At last, having found another bevy, as the Terrier attempted to pass him, the Pointer seized him, and placing his fore paws on him, held him fast, growling to keep him quiet, and maintaining his point until the sportsmen came up.

Always carry a whip, but never get in a passion! Without a whip a great many faults are passed over that otherwise would have been corrected; and the dog,

at last, becomes absolutely vicious. Some think it not wrong for a dog to chase a wounded bird, when desired to fetch, provided he is in command. But the better way is to shoot the bird again. A dog should never be allowed to hunt out of hearing, or, unless near you, to cross a fence.

This is esteemed, for common field sport, in this country, the only breaking necessary for a well-bred dog; and none should be trained, as aforesaid, whose pedigree is not as clear, and free from spot, as that of Sir Archy himself.

Some dogs show no great disposition to hunt till three or four years old. The late Doctor Smith, as keen and accomplished a sportsman as ever pulled a trigger, and from whom we derived in *totidem verbis* most of these hints, told us that he once had a dog four years old, who never pointed till he was past two, and at four was the most promising dog he ever owned.

It teaches that much patience should be used, and much time taken, before we abandon to his bad habits, a dog of good family; just as many a father has lost a noble son by not bearing a little longer with his indiscretions. Then it is that a kind mother's intense affection sometimes steps in to plead for, and if need be, like the king of birds, "offering their own lives in their youngs' defence."

Men differ in their tastes about dogs as well as about wine, and other things. Some prefer the Pointer; others the Setter. The difference between them is thus briefly described by good authority. The Pointer and the Setter, though used for the same purpose, offer individually a very different object for contemplation, either as regards their external appearance, or their

mode of questing game. The Setter is fleeter than the Pointer; and, as his feet are small and much protected by hair, he has a decided advantage on hard ground, or in frosty weather. But, at the commencement of the shooting season, when the weather is oppressively hot, he suffers more from thirst than the Pointer, arising, no doubt, from his long, thick, and warm coat of hair, which, though extremely convenient in cold weather, nevertheless exposes this generous animal to great inconvenience during the intense heat of the month of August, particularly on mountains where water is seldom to be met with. On the whole the Setter is a hardy, high-spirited animal; but he is often found troublesome to break, and can only be kept steady by incessant practice; backed, but too frequently by severe correction. For those who follow the diversion very ardently, the Setter will generally be found a valuable acquisition; but those who enjoy the fascinating amusement only occasionally, will find more satisfaction in the more steady and better regulated temper and exertions of the Pointer.

We may add here again, the remarks of the late S. B. Smith, M. D., of the United States Army, who gave decided preference to the Pointer. "I have noticed a fault of a generic character, and consequently irremediable, in Setters. It is an inability to run long, in hot weather, without free access to water. This, taken in conjunction with his difficult temper, determined me in favor of the Pointer."

To illustrate the sagacity of both of those superb specimens of the canine race, as well as the interesting and beautiful, not to say intellectual character of their performance, we must take room to record the following 30 THE DOG.

anecdotes, related to the writer by a friend, and duly registered at the time.

In hunting after grouse, in New Jersey, rather late in the season, when birds are difficult to find, we had two Setters in the field. It was observed that one would cast off and range wide in the field; while the other kept within range of the first, and nearer to the sportsmen. After an hour or two, the outranging dog would come in, and the other would cast off and range wide, while the first hunted near; and this alternate changing of position, and ranging close or wide, was maintained by the dogs for the greater part of the day, of their own consideration and instinct, without signal from their master. At last, towards evening, their industry and sagacity were rewarded by the outer dog's striking the trail of a small pack, which was immediately observed by the inner dog, who closed upon the other; and both dogs, after a beautiful trail upon their bellies, side by side, for nearly a quarter of a mile, as the birds kept moving, brought up upon a fine set, and left the rest of the duty to the sportsmen.

In another instance, but with different dogs, the birds could not be made to stop, but kept rapidly travelling before the dogs as they frequently do late in the season. After a long and ineffectual trail in this way, one of the dogs, a remarkably fine Pointer, cast himself off from the rest, and making a wide range over the plain, whirled, and came up in front of the birds. This manoeuvre had its desired effect. The birds stopped; the other dogs soon closed, and the birds were on a squat between them, all the dogs on a point. The sportsmen coming up soon, the birds were flushed, and ample work made with the pack. For brilliant actions like these, Bona-

parte was wont to knight his generals on the field of battle, as for instance, Davoust on the field of Wagram.

But one of the most extraordinary evidences of the reasoning power of dogs, happened as we have been credibly informed with a pointer dog, property of Mr. Peyton Randolph, of Virginia. Under his master's orders, when a hare was shot in the field, he would take charge of it and deliver it over honestly and faithfully as directed to the cook; but, he would then retire out of view, and seize the first opportunity, in the absence of the cook, to stedt it, and go off and bury it, for his own use, at a convenient season.

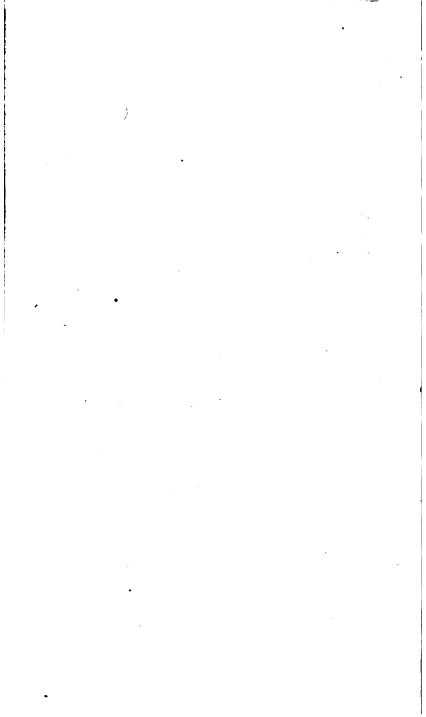
[&]quot;_____ let cavillers deny
That brutes have reason; sure 'tis something more:
'Tis Heaven directs, and stratagems inspire,
Beyond the short extent of human thought."

CHAPTER III.

THE NEWFOUNDLAND AND CHESAPRAKE BAY WATER-DOG.

THERE is yet another dog, which, in these sketches, brief and imperfect as they are, should not be overlooked, as his whole life is one of devotion to the will and pleasure of his master. We allude to the NEWFOUNDLAND: or, to speak with stricter reference to the kind of dog in common use at the present day, the Chesapeake Bay The original Newfoundland, has gotten to be much mixed in blood, by carelessness in breeding; yet much remains which is uniformly characteristic of the original stock, in respect of figure, size, colour and texture of coat. Hence the choice specimens of the water-dog, as he is yet to be found on the waters of the Chesapeake, in promptness to attempt, and vigour to execute all the purposes for which Providence designed him, are fully equal to every emergency. As to their stock, besides the best of them being still red, or black, there are other reasons for assuming that those most esteemed have descended from, and still partake distinctly of the blood and traits of a pair of these colours, brought directly, male and female, from Newfoundland to Maryland, nearly forty years ago. Of that importation we are glad to have it in our power to preserve the following authentic memoir, furnished, at our instance.





by the importer himself, a gentleman who possesses, as all his friends know, an instinctive fondness for good dogs, and good deeds!

"Baltimore, Maryland, January 7th, 1845.

"My DEAR SIR,-In the fall of 1807 I was on board of the ship Canton, belonging to my uncle, the late Hugh Thompson, of Baltimore, when we fell in, at sea, near the termination of a very heavy equinoctial gale, with an English brig in a sinking condition, and took off the crew. The brig was loaded with cod-fish, and was bound to Poole, in England, from Newfoundland. I boarded her, in command of a boat from the Canton. which was sent to take off the English crew, the brig's own boats having been all swept away, and her crew in a state of intoxication. I found on board of her two Newfoundland pups, male and female, which I saved. and subsequently, on our landing the English crew at Norfolk, our own destination being Baltimore, I purchased these two pups of the English captain for a guinea apiece. Being bound again to sea, I gave the dog pup, which was called Sailor, to Mr. John Mercer, of West River; and the slut pup, which was called Canton, to Doctor James Stewart, of Sparrow's Point. The history which the English captain gave me of these pups was, that the owner of his brig was extensively engaged in the Newfoundland trade, and had directed his correspondent to select and send him a pair of pups of the most approved Newfoundland breed, but of different families, and that the pair I purchased of him were selected under this order. The dog was of a dingy

red colour; and the slut black. They were not large; their hair was short, but very thick-coated; they had dew claws. Both attained great reputation as waterdogs. They were most sagacious in every thing; par-. ticularly so in all duties connected with duck-shooting. Governor Lloyd exchanged a merino ram for the dog, at the time of the merino fever, when such rams were selling for many hundred dollars, and took him over to his estate on the eastern shore of Maryland, where his progeny were well known for many years after; and may still be known there, and on the western shore, as the Sailor breed. The slut remained at Sparrow's Point till her death, and her progeny were and are still well known, through Patapsco Neck, on the Gunpowder, and up the bay, amongst the duck-shooters, as unsurpassed for their purposes. I have heard both Doctor Stewart and Mr. Mercer relate most extraordinary instances of the sagacity and performance of both dog and slut, and would refer you to their friends for such particulars as I am unable, at this distance of time, to recollect with sufficient accuracy to repeat.

"Yours, in haste,
"George Law."

On inquiry since the date of the above, of Mr. Mercer, and of Dr. J. Stewart, it is ascertained of the former, who owned Sailor, that "he was of fine size and figure—lofty in his carriage, and built for strength and activity; remarkably muscular and broad across the hips and breast; head large, but not out of proportion; muzzle rather longer than is common with that race of dogs; his colour a dingy red, with some white on the face and

breast; his coat short and smooth, but uncommonly thick, and more like a coarse fur than hair; tail full, with long hair, and always carried very high. His eyes were very peculiar: they were so light as to have almost an unnatural appearance, something resembling what is termed a wall eye, in a horse; and it is remarkable, that in a visit which I made to the Eastern Shore, nearly twenty years after he was sent there, in a sloop which had been sent expressly for him, to West River, by Governor Lloyd, I saw many of his descendants who were marked with this peculiarity."

Does it not seem to be characteristic of the best waterdogs, that like the eagle and the owl, the lion and the cat, and other birds and beasts of prey, whose condition and habits require extraordinary powers of vision, as does the dog when swimming in pursuit of ducks at a great distance, that they should have eyes of a yellow, or at least of an uncommon, not black colour?

In consideration of his uncommon sagacity, the good deeds he performed, and the good blood he transmitted, Sailor yet well deserves to have his burial-spot, if to be found, distinguished by the epitaph prepared by Lord Chancellor Eldon for his favourite dog Cæsar. With an alteration of a few words, it might well have been said for him,—

You who wander hither,
Pass not unheeded
This spot, where poor Sailor
Is deposited.
He was born of Newfoundland parents;
His vigilance during many years
Was the safeguard of Cedar Point.
His talents and manners were long
The amusement and delight
Of those who resorted to it.

Of his unshaken fidelity,
Of his cordial attachment
To his master and his family,
A just conception cannot
Be conveyed by language,
Or formed but by those
Who intimately knew him."

Were old Varnell (the trusted servant and duckshooter of that venerable and high-spirited patriot, Doctor J. Stewart,) still alive, he could relate many most extraordinary feats performed by Canton, at Sparrow's Point. She surpassed her species generally in unrivalled devotion to the water, and to the sport of ducking, as carried on by the old Doctor's coloured man, Varnell, with his murderous swivel gun! Her patience and endurance of fatigue were almost incredible, and her performances would be best illustrated by taking down from the old Doctor, and others, who remember them, the facts of her fights with wounded swans, after pursuing them in the water for miles. Also her extraordinary pursuit of wounded ducks, amongst rotten and floating ice, and sometimes in fogs and darkness. On one occasion she brought out 22 or 23 ducks, all killed or wounded by Varnell at a single shot. A good deal of time was lost in pursuing these wounded ducks, and at the close of this pursuit, it being then dark, Varnell gave up the slut as lost, so many hours had she been engaged in bringing out her game; but after Varnell had sorrowfully turned his face homewards, she overtook him with one or two ducks in her mouth; and the old Doctor remembers hearing Varnell say, that at one time, when she was most fatigued, she climbed on a cake of floating ice, and after resting herself on it, she renewed her pursuit of the ducks.

One of the most knowing dogs of this breed, belonging to a favourite servant, who being carpenter and duckshooter for his master, Mr. Fielding Lewis, on James River, deserves to be mentioned, though we regret not to have his name. His owner could at any time send him home from the woods for any tool in his "chest." He would give him the key and tell him to go home and bring his saw, for instance. The carpenter's wife would open the chest and the dog pick out and carry the tool he was sent for. He would even go home at command, and take from the corner a "chunk of fire," when he could pull out one that he could carry without burning himself, and practised that duty commonly, until Mr. Lewis saw him one day going with it on a path which had led through the barn-yard, and so forbid him ever being ordered again on that hazardous service.

The best living specimen of her stock, probably, is DRAKE, a sorrel-coloured dog, with yellow eyes, now aged, the property of Mr. Harrison, of Baltimore, and pronounced by Mr. Thorndike, high authority in such cases, the best dog he ever saw. The portrait at the head of this sketch is said to represent his form. All advantage should be taken, while yet he lives, to preserve his blood, when subjects worthy of his embraces can be found.

In their descendants, even to the present remote generation, the fine qualities of the original pair are conspicuously preserved, in spite of occasional stains of inferior blood. As public morals are influenced by forms of government, and the principles and manners of men in high authority; and the coat of wool-bearing animals is affected by food and climate, so local wants and circumstances will modify the breeds of dogs. And no theatre,

38 THE DOG.

it will be admitted, can excel that of the Chesapeake and its noble tributaries, for the development of the high qualities of the water-dog. He of Newfoundland, transported there, finds himself, as it were, in his native element.

It is, by the by, but an act of justice to all that tidewater portion of Virginia and Maryland,-the cradle of all the sons to whom they owe their ancient renown,to protest, en passant, that while no district on the habitable globe excels it for excellence and variety of natural productions, whether of fruit or vegetable, fish or fowl, our naturalists have, for the most part, passed it by as if it were a desert waste, or lagoon, exhaling the malaria of the Pontine marshes. Even our birds, whether of land or water, of brilliant plumage or melodious song, that claim our rivers and forests as their native home, or favourite resort, attaining therein their highest perfection, have been either overlooked, or, if described, associated with other localities, in themselves less attractive and bountiful, and far less congenial to these charming inhabitants of our woods and waters. But, to return to the water-dog, There is one now (Leo) at Maxwell's Point, on the Gunpowder River, in Maryland, a descendant of Sailor, through a slut pup of his, (given to Mr. Ricketts' father by Doctor A. Thomas,) who deserves to be named as a noble specimen of his tribe; for, he can "swim as far, dive as deep, stay down as long, and come up as dry," as any dog in all Newfoundland. Leo is the property,—we should rather say, the companion and friend,—of Mr. Ricketts "of that ilk;" himself every inch a sportsman, one who, as to every game-bird that "nature hath taught to dip its wing in water," knows where to find, how to kill, and, what's more, how

to cook and eat it as a gentleman should! But it's of his dog we would be speaking. Leo stands in height from 20 to 22 inches; black, with a small white spot in his breast, and a little white on each foot; his eyes, again, yellow! His form is something after the model of the Setter, without his feathery tail, or the smooth one of the Pointer; not so deep in the chest as the Setter; but rounder in his body, and larger in the neck; with his ear smaller, and more set up, and the tips of them turning down. His hair not exactly long, yet further from being short; with a woolly under-jacket to protect his skin from the water; for he has often to make his way through the ice. Such is the personnel of Leo—a dog

"Whose honest heart is still his master's own,
Who labours, fights, lives, breathes for him alone."

Many anecdotes might be related in proof of his reasoning powers; but we have room only to add, in general terms, that he comes fully up to the line of his duty. Of how few bipeds can we say as much? When ducks are passing over he takes his stand with his master, his fore feet resting on the blind, and, still as a mouse, he watches not the gun, nor any thing but the game as it approaches; and listening to hear the shot strike, the moment a duck is seen to falter in its flight, as it falls, the good dog plunges in the river like a ball from a cannon, and, from whatever distance, brings the duck and lays it at the feet of his master. He has been known to bring out as many as three at a time; and has the sagacity, when some are only crippled, and in danger of being lost, to give to them first a finishing grip, leaving such as are stone dead to be secured at leisure. When a duck dives to escape him, it is curious to see how he will stand erect, head and shoulders out of water, watching in all directions for its reappearance. Such are the offices, such the achievements of the high-bred water-dog of the Chesapeake Bay, and the noble estuaries that commingle in its bosom.

On breaking the water-dog, little need be said; for, like Dogberry's reading and writing, his education "comes by nature." In his infancy he may be taught to bring a glove and lay it down at your feet as he should do; and, by practice, the comprehension and fulfilment of his various duties will soon follow. He will be found, with judicious encouragement and exercise of authority, more docile than a child. They have been known, at four months old, to fetch a duck; but, lest the constitution be impaired, he should not be put too early at hard service.

As to Maxwell's Point! there is some consolation in knowing that in this wide world of ours, abounding so much—in debt and cold water,—there is yet one point of land left where gentlemen can meet gentlemen, to go forth at early dawn, with each his fine "stub" or "wire twist" John or Jo Manton, of inch calibre, and four feet three inches in the barrel; and if among them any dispute happen about whose duck it is, a challenge is passed, and promptly accepted, to meet and settle all differences across the table that afternoon, with implements that, though they go off with a pop, serve only, for the moment, to raise the spirits of the parties, and do no damage that is not soon cured with a few doses of Johnston's Sherry, or Doctor Lee's "ether Mad."

P. S. How to cook a canvass-back.—Take it, as soon after the "leaden messenger" brings it down, as possible,

even while it is yet warm, if it can be so, and cook it in a "tin kitchen," turning and basting it frequently with a gravy, composed in the bottom of the oven, with a little water and a grain of salt, and its own drippings. The fire should be a brisk one, (hickory the best,) so that it may be done "to a turn" in twenty-five, or at most thirty minutes. Serve it up immediately, in its own gravy, with a dish of nice, well-boiled (and then fried) milk-white hominy; and then, if it may so happen, with Cadwallader's old "butler" at your elbow, if such fare do not

"Raze out the written troubles of the brain,"

and dispose the partaker "to love his neighbour as himself," and thank Providence for all his bounties,

"Oh bear him to some distant shore, Some solitary cell, Where none but savage monsters roar, Where love ne'er deigns to dwell."

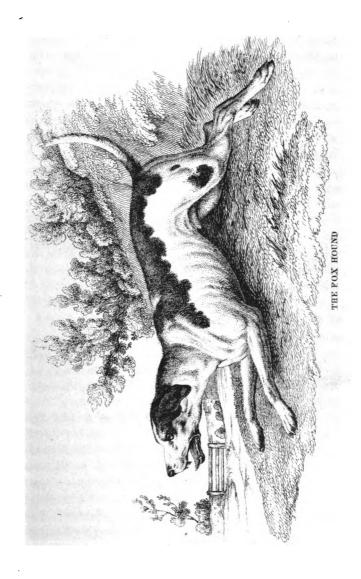
In the midst of such temptations, even the incomparable Willard, of the City Hotel, who never was known to forget any thing, might be excused for—forgetting himself.

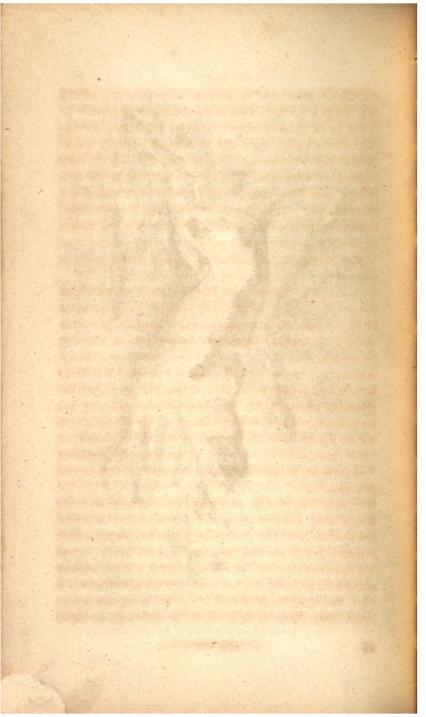
CHAPTER IV.

FOX-HOUNDS AND FOX-HUNTING.

"For my own part, I intend to hunt twice a week, during my stay with Sir Roger; and shall prescribe the moderate use of this exercise to all my country friends, as the best physic for mending a bad constitution, and preserving a good one."—Spectator.

OF all the field sports the chase may be regarded as the most magnificent; and we suppose it may be seen in its most perfect style at Melton Mowbray, in England; whether we refer to the dashing scarlet and the beautiful green uniform of the hunt,—the reckless daring of the rider,—the high form and finish of the hunter,—the practised skill of the huntsman,—the number and tip-top condition of his pack,—or, lastly, to the fine open country for the line of chase. All combine to display the athletic manly form, physical capacity and game spirit of man, horse and dog, to the greatest possible advantage, making the most splendid exhibition of rural enjoyment that the imagination can conceive, or the heart of man enjoy. How it is, we cannot so easily describe; but there is certainly, as the Frenchman says, a je ne scai quoi of excitement, a sort of hallucination, about the chase, that borders on madness, delightful madness! beginning with the mount, kindling as you ride to cover,





fairly taking fire at the first challenge, when some well-known old truth-teller strikes the trail, and swelling as the cry increases, truly to a "whirlwind of emotion;" when, at last, it tells you "the game is up," and Reynard is "tally ho'd" as he slyly breaks cover down the wind; the fit of ecstacy sometimes remaining on, until, peradventure, without a check, the echoing horn almost too soon announces "the death!" But we dare not trust imagination, memory, or pen upon the subject. A few practical suggestions is all that is permitted us. The reader is not to consider us as here making any pretensions to a regular work on the natural history and varieties of the fox-hound, or his peculiar game.

Long after Shakspeare's time, his description of Hippolitas's dogs, their music and style of action, was still applicable to the fox-hound then in use.

"My hounds are bred out of the Spartan kind,
So flew'd, so sanded; and their heads are hung
With ears that sweep away the morning dew;
Crook-kneed, and dewlapped like Thessalian bulls.
Slow in pursuit, but matched in mouth like bells,
Each under each; a cry more tuneable
Was never halloo'd to, nor cheer'd with horn,
In Crete, in Sparta, nor in Thessaly."

Then it took the old short-legged Talbot hound a whole day to kill his game. Reynard was worried down, rather than run into, as now. But we are not sure that in this case, more than in some others, change is synonymous with improvement. The modern hound, of shorter ear, and higher form, and chopping note, may be said to "put the issue on a brush," running with a speed that could not be followed, had not a corresponding change been effected in the hunter by the infusion of

more blood. Instead of dwelling, as formerly, at every loss, and circling backward, to make it off, the pack, spreading, forward at the instant, like the ribs of a lady's fan, and moving all ahead, "hit it off" again almost before it is lost, keeping the chase always afoot. Thus the most gallant fox is sometimes blown and heart-broken, in the very burst, without one chance to rest, and roll, and listen and recruit, in hope of escape from his ruthless pursuers.

Advanced as England is in science, in art, and in arms, the accomplishments of the well-bred Englishman are no where more conspicuous than in his enjoyment of field sports, and the magnificence of all the appointments thereunto appertaining. But the elegant leisure of the aristocratic sportsman of that monarchy, with their expensive and perfect fixtures and conveniences, are not to be realized or expected in our own "hard-fisted democracy." Prudence prescribes, and necessity enforces more simple and economical arrangements for every species of field amusement; and to that consideration we must conform in these brief practical hints for American sportsmen.

The first thing to be attended to with young dogs of all kinds is, to make them know their names well, and to answer to them, before training; and for this they should be rewarded. After hounds have learned to follow, they should be coupled, and led often out among sheep, and carefully taught that of all things a sheep is the most sacred, too much so even to be looked at! "A cat may look upon a king;" but a dog must never look at a sheep; for, if he once tastes of its blood, like a married man (as it is said) who once goes astray, there will always be danger on that point, as long as your dogs can wag a

tail. Bring up your dog, as well as your child, in the way it should walk. Young hounds will be more tractable and attentive if often taken out by people who are on foot. They should always be "entered" or broken at their own game. If broken, as some break them, to hares, it imposes the necessity of breaking them over again, just as children, foolishly indulged, and sometimes even encouraged, in speaking ungrammatically, and otherwise behaving naughtily, require to be untaught and reinstructed, the former often proving the more difficult task of the two.

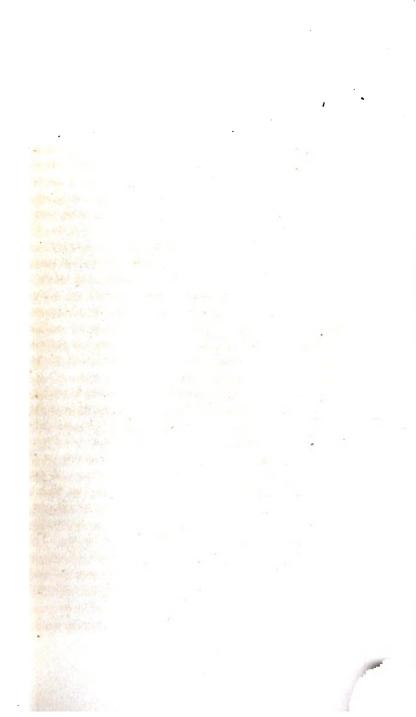
Close attention to shape is as necessary in the hound as in the hunter, to insure both speed and lastingness proportioned to the work which an old red fox is sure to cut out for them. "Let his legs," says Beckford, "be straight as arrows; his feet round, and not too large; his chest deep, and back broad; his head small; his neck thin; his tail thick and brushy; if he carries it well, so much the better." A small head is more comely, but we should not object to a large head in a hound, especially in that part of it where the power of smell is located.

If, in company with an old hound or two to teach them, fox cubs could be turned out to young dogs, it would materially advance their education. Having been, in this way, blooded to their true game, it will afterwards be more difficult to repress than excite their ardour. Every means of encouragement should be used in the early stages of the training of the fox-hound; and punishment should not be administered till after they have made some progress, for fear of nipping a good plant in the bud. In flogging, the voice should be used at the same time, to indicate and impress deeply on his mind the nature of the offence committed, as "ware rabbit,"—

"ware sheep," so that whenever he sees hare or sheep, the lash may ever be associated in his recollection with the sight of them, or the sound of the same words.

"Beckford's Thoughts on Hunting" contains more ample instructions, and may be recommended as the first and best prose work on the subject. Every gentleman sportsman, and lover of high-bred dogs, (as all such sportsmen are,) is supposed to be familiar with Gay's poem on "Rural Sports," and Somerville's on the "Chase." Both are well adapted to beguile a day of dirty weather, and to form, perhaps, the best substitute for,—if any thing on the "earth beneath" can be compared with,—the thing itself, when, mounted on a sure and gallant steed, fond, like his master, of the chase, and carrying him firmly at the stern of the pack, all well together, with heads up, and tails down, they are running now, after occasional losses, in breathless and almost mute assurance of victory!

What Lord Chatham once said of a battle, is particularly applicable to a good fox chase. It should be sharp, short, and decisive. Hence, in view of the uncleared and difficult country over which the chase lies for the most part, in our country, the gray fox gives us the best sport. One thing should be borne in mind, that care should be taken in breaking in young dogs, and with all dogs, in the commencement of the season, to choose a good scent-lying day, and be careful of all circumstances which may contribute to insure a taste of blood. Thus a stimulus is given, the effect of which will be enjoyed throughout the season. As in some other undertakings, confidence goes a long way towards insuring a successful issue to the enterprise.





CHAPTER V.

THE SHEPHERD'S DOG.

THE extension of sheep husbandry which is going on in the United States, and the importance of his services therein, bid fair to place the Shepherd's dog very soon in the front rank for real utility in the public estimation. It may, in fact, be affirmed that this branch of rural industry cannot be pursued with complete success without his aid—especially in all that part of our country, to wit: the mountain ranges, from Maryland to Georgia, which nature may be said to have designed for our national sheep pastures, and which must be so appropriated, when their peculiar advantages for that important object shall have gotten to be more generally understood.

Of this breed of dogs there are several varieties, few specimens of which have been imported. The Pyrenean, or St. Bernard's dog, is one of great size, immense strength, and indomitable courage. He accompanies the large merino flocks of Spain in their annual migrations to the mountains, protecting them from the numerous wolves with which the Pyrenees abound. Two individuals (unfortunately both males), splendid specimens of that breed, were sent to the writer of these sketches by that spotless patriot, and illustrious friend of

our country, General Lafavette; recommended by him, from personal experience, as being of inestimable value to wool-growers in all regions exposed to the depredations of wolves and sheep-killing dogs. With a view to this agricultural necessity of our country, the author of this work has ventured to put in requisition, for the procurement of another pair, the kind offices of G. W. Lafavette, who, with all his other virtues and purity of character, inherits, also, in all its force, his honoured father's devoted and generous attachment to America.

The Pyrenean, or St. Bernard dogs, sent by General Lafayette, were white, with a large portion of light brown colour. There are said to be two breeds of the Pyrenean, as well as of the Newfoundland:—one with longer, the other with shorter hair. Both are trained, in the winter time, to "carry a basket with some food and wine; and thus equipped, they sally forth from the Hospice of St. Bernard's, and other passes, in search of travellers who may have lost their way, or fallen beneath the snows of the preceding night. They are followed by the monks devoted to that service of humanity; and, every winter, several lives are saved by their united means."

But the true shepherd's dog, most in use, and best adapted to the common care of sheep, and all the duties connected with that business—except that of protection from wolves—is a much smaller animal, seldom two feet high. From General Lafayette, on another occasion, we received a pair that were perfectly black; with head and nose sharp and pointed, and with a manner and countenance indicating uncommon alertness and intelligence. They were placed the day of their arrival, for

safe keeping, in a kennel at Green Mount, near Baltimore; escaped the same day, and, though advertised, with all the notable circumstances of their importation, were never recovered. In Great Britain, and particularly in Scotland, the colours of the shepherd's dog are more mixed with shades of red and brown; or black dogs, with sharp ears, turning down at the tips. The Scotch breed is, probably, the one best suited to our purpose. where there are no wolves; and where there are, it should be accompanied by the large dog of the St. Bernard's breed, whose instinct prompts him, as we learn from a gentleman who has had good opportunities to judge, to remain constantly, both night and day, with the sheep; and whether the master be present or not, they always remain on duty; and the shepherd, with the utmost confidence, leaves them, for many hours together, in sole custody of the flock. At such times, woe be to the prowling wolf, or sneaking dog, that comes in their way. He is torn to pieces with the utmost fero-With man he is more gentle, though he, if a stranger, is not permitted to get within reach of their charge.

The sheep dog, in natural power of intellect, is said to be not inferior to the Newfoundland; while long training, from generation to generation, to more complicated and important duties, has engrafted on his character the highest degree of canine sagacity, vigilance and patience. Hence "we see in his conduct an instinctive impulse of order, and of care, which are strongly impressed upon the sedate and self-possessed expression of his countenance." We have witnessed with astonishment, says a writer of authority on this subject, "with what rapidity, after a few words, or a sign of his master,

a dog of this breed would fly over a vast surface of open country, single out, drive together, and bring up a particular class of sheep from among a large flock, and lead them to our feet. All this was effected without confusion, in a few minutes, and without the least violence."

The portrait here prefixed is supposed to represent well a specimen of the Scotch collie dog, (already recommended,) one of which may be seen at "Hereford Hall," near Albany, in the possession of that eminent and liberal cultivator, Mr. Sotham, whose dog, it is said in the "Cultivator," where his likeness may be seen, will perform about all that is attributed to any of the species. We regret that it is not in our power to give his name; and that we were not favoured with an introduction to him on a late interesting and agreeable visit to his hospitable master.

We have been told by General J. T. Mason, who has been much in Mexico, and by Col. Pendleton, late Chargé d'Affaires of the United States in Chili, that it is the practice in both Chili and Mexico, to take the pup intended to have the care of the sheep, before his eyes are yet open, and put him to be suckled, and so subsisted on the milk of the eve.

Of the employment of the Mastiff, also, and his efficient agency in the care of sheep, in Spain, we have, since writing the preceding, been favoured by a friend with the following sketch, going to show that he there effectually takes the place, and performs the offices we have assigned to the Pyrenean or St. Bernard dog. Their temper and character would seem to be almost identical.

"The Mastiff, in Spain, where, in my opinion, its race

has been most improved, is large, the fore and hind feet very strong, the hair short, and the head a little pointed. With an iron collar around his neck, having pointed nails in it, he is enabled to hunt and kill the wolf. Spaniards consider this race of dogs the most useful, the most noble, and the most courageous of any other. never loses his self-possession, nor forgets the voice of his master, to whom he is always very obedient. He is principally employed in tending the herds of cattle, and, more particularly, the flocks of sheep. Two shepherds, with one ass, and two dogs, are strong enough to mind a flock of 1000 sheep, and to walk five miles a day when travelling from the north to the south of Spain. make known to the shepherds those which are tired. They drive back to the flock those that go astray; give notice when any are delivered of young, that the shepherds may have the lamb put on the ass; and watch that no dangerous animals approach the flock. At night the shepherds form a ring, by means of stakes driven in the ground, and ropes passing from one to the other, into which the flock is driven; the dogs watching that the sheep be not stolen, by constantly walking round the ring.

"They are very friendly and faithful to their masters. They are very fond of accompanying them when they go on horseback, keeping always a gun-shot ahead, and, by barking, giving them notice of any danger, and returning to the side of the horse to defend them. He eats very plentifully of every thing, and is considered indispensable to those who economize personal labour on large estates, one dog being considered equal to two men for guarding the flock."

Puppies, or dogs already trained, can be had, via

Havana and Santander. I had, in 1832, a male and female already trained and grown. The female died of the great heat, without leaving any breed; the dog was the best watch-dog I have ever known.

I believe the expenses, as far as Havana, would not be less than \$70 or \$80; coming under a bill of lading as merchandise. M. Martinez del Campo tells me, he has an uncle in Spain, who is a great sheep-raiser; and that in a letter he had from him some time ago, speaking of his farm and flocks, and loss of sheep, that the greatest stress was laid on the fact of his having lost six dogs; that was, he considered, the sum total of his misfortunes.

There is a story related of an English Mastiff (which had been crossed with the stag and blood hound), who in the reign of Queen Elizabeth,—when Lord Buckhurst was ambassador at the court of Charles IX.,—alone and unassisted, successively engaged a bear, a leopard, and a lion; and pulled them all down. The colour of the English Mastiff is usually a deeper or lighter buff, with dark muzzle and ears. One, the property of the 23d regiment, measured 29½ inches in height at the shoulder. "The care of these dogs in watching, is well known; and the cool attention they have evinced in walking by the side of a nightly thief—forbidding his laying his hands upon any article, yet abstaining from doing him any bodily harm, and suffering his escape over the walls, is sufficiently attested."

Scott testifies to the utility of this dog in Scotland, and gives a touching picture of his fidelity, where, in Marmion, he paints the awful snow-storm, heginning, the reader may remember, with the lines—

"When red hath set the beamless sun,
Through heavy vapours, dark and dun;
When the tired ploughman, dry and warm,
Hears, half asleep, the rising storm,
Hurling the hail and sleeted rain,
Against the casement's tinkling pane:
The sounds that drive wild deer and fox
To shelter in the brake and rocks,
Are warnings which the shepherd ask
To dismal and to dangerous task."

Driven abroad to face the tempest and to save his flock, the shepherd is made to call, not on the tired ploughman, nor the lordly owner, for assistance; rather in his faithful dogs he puts his trust,

"Whistling, and cheering them to aid, Around his back, he wreathes his plaid;"

and when at last he is overwhelmed by the violence of the storm, and sinks to perish in the snow, the fine picture, with a pencil ever true to nature, is finished with a sketch of "poor Yarrow," as he

"Crouches upon his master's breast,
And licks his cheek to break his rest."

Opulent men, especially if farmers, ought to import, at once, the genuine Mastiff, the Pyrenean and the common Shepherd's dog, and other animals likely to be useful to the country. In the lifetime of General STEPHEN VAN RENSELLAER, and the late ROBERT OLIVER, a hint from any respected quarter was all that was necessary, and the order was given, cost what it might. Not for their own, but for the benefit of society, the examples of such men should be held up for universal admiration,

and their memories be cherished gratefully and for ever. What more honourable disposition can be made, with a portion of his means, by him who is blessed with abundance? The best sort of benefactor is he who adds one more to our stock of good fruits, vegetables, or domestic fowls or animals. Why does not some one, possessing the facilities for doing it, import the Mexican domesticated pheasant? and the barn-door fowl from China, which Mr. Cushing says is nearly as large as our turkey?

Professing only to give brief sketches of the characteristics and uses of the several breeds of dogs referred to, we had closed what we had to say of the one devoted to the purposes of the shepherd, when, fortunately receiving, by the kindness of the editor, the third volume of that valuable journal, the American Agriculturist, we there found the following communication. It confirms, if confirmation had been needed, what had been said of the manner of rearing the Shepherd's dog in South America, besides giving interesting details in proof of the prodigious sagacity and great value of that particula race.

We extract the following information from the work mentioned.

"Although Mr. Kendall and some other writers have described this wonderful animal as a cross of the Newfoundland dog, such, I think, cannot be the fact; on the contrary, I have no doubt he is a genuine descendant of the Alpine Mastiff, or more properly, Spanish shepherd-dog introduced by them at the time of the conquest. He is only to be found in the sheep-raising districts of New Mexico. The other Mexican dogs, which number more than a thousand to one of these noble animals, are the

results of a cross of every thing under the sun having any affinity to the canine race, and even of a still nobler class of animals, if Mexican stories are to be credited. It is believed in Mexico, that the countless mongrels of that country owe their origin to the assistance of the various kinds of wolves, mountain cats, lynxes, and to almost if not every four-footed class of carnivorous animals. Be this as it may, those who have not seen them can believe as much as they like; but eye-witnesses can assert, that there never was a country blessed with a greater and more abundant variety of miserable, snarling, cowardly packs, than the mongrel dogs of Mexico. That country of a surety would be the plague-spot of this beautiful world, were it not for the redeeming character of the truly noble shepherd-dog, endowed as it is with almost human intellect. I have often thought, when observing the sagacity of this animal, that if very many of the human race possessed one half of the powers of inductive reasoning which seems to be the gift of this animal, that it would be far better for themselves and for their fellow-creatures.

"The peculiar education of these dogs is one of the most important and interesting steps pursued by the shepherd. His method is to select from a multitude of pups a few of the healthiest and finest-looking, and to put them to a sucking ewe, first depriving her of her own lamb. By force, as well as from a natural desire she has to be relieved of the contents of her udder, she soon learns to look upon the little interlopers with all the affection she would manifest for her own natural off-spring. For the first few days the pups are kept in the hut, the ewe suckling them morning and evening only; but gradually, as she becomes accustomed to their sight,

she is allowed to run in a small enclosure with them, until she becomes so perfectly familiar with their appearance as to take the entire charge of them. After this they are folded with the whole flock for a fortnight or so; they then run about during the day with the flock, which after a while becomes so accustomed to them, as to be able to distinguish them from other dogs—even from those of the same litter which have not been nursed among them. The shepherds usually allow the slut to keep one of a litter for her own particular benefit; the balance are generally destroyed.

"After the pups are weaned, they never leave the particular drove among which they have been reared. Not even the voice of their master can entice them beyond sight of the flock; neither hunger nor thirst can do I have been credibly informed of an instance where a single dog having charge of a small flock of sheep was allowed to wander with them about the mountains, while the shepherd returned to his village for a few days, having perfect confidence in the ability of his dog to look after the flock during his absence, but with a strange want of foresight as to the provision of the dog for his food. Upon his return to the flock, he found it several miles from where left, but on the road leading to the village, and the poor faithful animal in the agonies of death, dying of starvation, even in the midst of plenty; yet the flock had not been harmed by him. A reciprocal affection exists between them which may put to blush many of the human family. The poor dog recognised them only as brothers and dearly-loved friends; he was ready at all times to lay down his life for them; to attack not only wolves and mountain-cats, with the confidence of victory, but even the bear, when there could be no hope.

Of late years, when the shepherds of New Mexico have suffered so much from Indian marauders, instances have frequently occurred where the dog has not hesitated to attack his human foes, and although transfixed with arrows, his indomitable courage and faithfulness have been such as to compel his assailants to pin him to the earth with spears, and hold him there until despatched with stones.

"In the above instance the starving dog could have helped himself to one of his little brother lambs, or could have deserted the sheep, and very soon have reached the settlements where there was food for him. But faithful even unto death, he would neither leave nor molest them, but followed the promptings of his instinct to lead into the settlement; their unconsciousness of his wants, and slow motions in travelling were too much for his exhausted strength.

"These shepherds are very nomadic in character. They are constantly moving about, their camp-equipage consisting merely of a kettle and bag of meal; their lodges are made in a few minutes, of branches, &c., thrown against cross-sticks. They very seldom go out in the daytime with their flocks, intrusting them entirely to their dogs, which faithfully return them at night, never permitting any straggling behind or lost. Sometimes different flocks are brought into the same neighbourhood, owing to scarcity of grass, when the wonderful instincts of the shepherd's dogs are most beautifully displayed; and to my astonishment, who have been an eye-witness of such scenes, if two flocks approach within a few yards of each other, their respective protectors will place themselves in the space between them, and as is very naturally the case, if any adventurous sheep should

endeavour to cross over to visit her neighbours, her dog protector kindly but firmly leads her back, and as it sometimes happens, if many make a rush and succeed in joining the other flock, the dogs under whose charge they are, go over and bring them all out, but strange to say, under such circumstances they are never opposed by the other dogs. They approach the strange sheep only to prevent their own from leaving the flock, though they offer no assistance in expelling the other sheep. But they never permit sheep not under canine protection, nor dogs not in charge of sheep, to approach them. Even the same dogs which are so freely permitted to enter their flocks in search of their own are driven away with ignominy if they presume to approach them without that laudable object in view.

"Many anecdotes could be related of the wonderful instinct of these dogs. I very much doubt if there are Shepherd dogs in any other part of the world except Spain, equal to those of New Mexico in value. The famed Scotch and English dogs sink into insignificance by the side of them. Their superiority may be owing to the peculiar mode of rearing them, but they are certainly very noble animals, naturally of large size, and highly deserving to be introduced into the United States. A pair of them will easily kill a wolf, and flocks under their care need not fear any common enemy to be found in our country."

In the same volume, honourable mention is made of a tailless breed of dogs employed in the care of sheep and cattle in England. We take room for the following extract, to impress as far as possible, on the mind of American farmers, the important aid to be derived from dogs of the proper blood, in extending our sheep-hus-

bandry, hoping that when their value shall have been realized, measures will be taken by our legislatures to diminish the number of base sheep-killing curs, with which every part of the country is infested.

"Speaking of dogs, I think the Shepherd's dog the most valuable of his species, certainly for the farmer. Our dog Jack, a thorough-bred Scotch collie, has been worth \$100 a year in managing our small flock of sheep, usually about 700 in number. He has saved us more than that in time in running after them. After sheep have been once broken in by, and become used to the dog, it is but little trouble to manage them; one man and the dog will do more than five men in driving, yarding, &c. Let any man once possess a good dog, he will never do without one again.

"The sagacity of the Shepherd's dog is wonderful; and if I had not seen so much myself, I could hardly credit all we read about them. It is but a few days since I was reading in a Scotch paper a wonderful performance of one of these collie dogs. It seems the master of the bitch purchased at a fair some 80 sheep, and having occasion to stay a day longer, sent them forward and directed his faithful collie to drive them home, a distance of about 17 miles. The poor bitch when a few miles on the road dropped two whelps; but faithful to her charge, she drove the sheep on a mile or two farther—then allowing them to stop, she returned for her pups, which she carried some two miles in advance of the sheep, and thus she continued to do, alternately carrying her own young ones, and taking charge of the flock, till she reached home. The manner of her acting on this occasion was gathered by the shepherd from various persons who had observed her on the road.

On reaching home and delivering her charge, it was found that the two pups were dead. In this extremity the instinct of the poor brute was yet more remarkable; for, going immediately to a rabbit brae in the vicinity, she dug out of the earth two young rabbits, which she deposited on some straw in a barn, and continued to suckle them for some time, until they were unluckily killed by one of the farm tenants. It should be mentioned that the next day she set off to the place where she left her master, whom she met returning when about 13 miles from home.

"The anecdotes of their sagacity are innumerable, and truly wonderful.

"I purchased a bitch of the tailless species, known as the English drover dog, in Smithfield market, some two years ago. That species is much used upon the downs, and are a larger and fleeter dog than the collie. We raised two litters from her, got by Jack, and I think the cross will make a very valuable dog for all the purposes of the farmer. They learn easily, are very active, and so far they fully answer our expectations.

"A neighbour to whom we gave a bitch of the first litter would tell her to go into such a lot, and see if there were any stray cattle there; and she would go over the field, and if there were any there, detect them and drive them down to the house. He kept his cattle in the lot, and it was full 80 rods from the house. The dog was not then a year old. We had one of the same litter which we learned to go after cows so well, that we had only to tell him it was time to bring the cows, and he would set off for them from any part of the farm, and bring them into the yard as well as a boy. I think they would be invaluable to a farmer on the prairies. After raising two litters, we sent the bitch to Illinois. I hope

farmers will take more pains in getting the Shepherd dog. There is no difficulty in training. Our old one we obtained when a pup, and trained him without any trouble, and without the help of another dog. Any man who has patience, and any dog knowledge at all, can train one of this breed to do all that he can desire of a dog."

About thirty years ago, Mr. Baudury, of Delaware, had the Spanish Shepherd's dog, which he thus described:

"The dog you inquire after is three times as large as the Shepherd's dog described by Buffon, but is endowed with the same good qualities: immense strength and great mildness in his usual deportment, though ferocious towards other dogs. I can say, without exaggeration, that at least twenty dogs have been killed in my barnyard, or on my farm, by my dog Montague.

"I annex a picture of Montague, with his dimensions:

"I annex a picture of Montague, with his dimensions: three feet eleven inches from his eyes to the root of his tail, and two feet eight inches high over the shoulders. He is a fine animal, entirely white. I prefer that colour in recollection of the story of old Jacob. In fact I had formerly a black dog, and many of my lambs were born black. Since I have Montague and his mother, I have very few black lambs.

"The natural instinct of this animal is to guard your sheep against wolves and dogs. No other training is required, but to keep them constantly with your flock, the moment they are from the litter, until they are grown."

Referring to this variety of the Shepherd's dog, G. W. Lafayette says, in a letter of the 31st of December, to the author of these sketches:—"It will be easy, my dear friend, to send you two good Shepherd's dogs, but very

difficult to induce a shepherd to quit his village to go to the United States. French people, born in the country, in a certain position, are rather unenterprising, not having yet arrived at the point of venturing to emigrate, even where their interest would prompt them. To persuade one of our shepherds to go abroad, would require a pecuniary consideration out of proportion to any services that he could render, and even then I would not answer, that after arriving in America, he would not become homesick and wish to get back to France. But if you wish to have dogs, it is very easy to send you at the same time instructions, with their names, and particular destination when in use-for in general they are disciplined to guard the flock, one near at hand and the other far off, and I can assure you they will learn the English language in much less time than their masters would require to be taught a few words of it." the sheep-growing interest is in a way to owe an important boon to one whose name is associated with all that is most glorious and conservative in the history of the country and the principles of the government, such at least as his father fought and bled to establish.

CHAPTER VI.

THE TERRIER.

Widely distributed and well known as this dog is, it would appear a strange omission to say nothing of him in a work intended for the use of all who have ownership or management of stables and horses, with which the Terrier is so generally and usefully associated.

In England a Terrier is usually an attendant of Foxhounds, and is employed to pursue the fox when he takes to earth. The huntsman is enabled to form an opinion of the distance he will have to dig, by the sound of the Terrier's voice, when he comes near the game. They are, every where, active enemies of vermin of every sort, but most particularly useful in rat-killing. Billy, the celebrated English Bull Terrier, was stated to have killed 100 rats, in seven and a half minutes. Genuine Terriers are distinguished by no exclusive colour; but are divided into the smooth, and wire-haired, or Scotch Terrier. In moral temperament they are most remarkable for vivacity, and a courage that quails not in the presence of a superior force. On the contrary, like small men, they are very irascible and quick to take

offence, even where none is intended; nor are they at all inferior to the most accomplished race of dogs in natural sagacity, not to say cunning. Mr. Adair, an Irish gentleman, resident of Baltimore, had one that would steal into his master's chamber, and repose on the middle of his bed, until he heard his footstep approaching, when he would quietly slip down behind the bed; and there, on the floor, pretend that he had been sleeping all the time. That he is very revengeful of injury, and knows how to form alliances for the purpose of retaliation, was illustrated in a remarkable manner, by a well-authenticated anecdote, related by Mr. Hope, of a gentleman in England; who, being fond of exercise, used to go on horseback from Staffordshire to London, allowing his faithful Terrier to follow him; and, for safety, while in town, leaving him always in the care of his landlady. On one occasion, calling for his dog, the landlady appeared with a doleful countenance, saying, "Alas, sir, your Terrier is lost! Our great house dog and he had a quarrel, and the poor terrier was so worried and bit before we could part them, that I thought he could never have got the better of it. He, however, crawled out of the yard, and no one saw him for almost a week. He then returned. and brought with him another dog, bigger by far than our house dog; and they both together fell on our great dog, and bit him so unmercifully that he has scarcely since been able to go about the yard, or eat his meat. Your dog and his companion then disappeared, and have never since been seen at St. Albans." On the gentleman's arrival at Whitmore, he found his little Terrier: and, on inquiry into the circumstances, was informed that he had been at Whitmore, and had coaxed away

the great dog, which it seems had, in consequence, followed him to St. Albans, where they completely avenged the outrage committed on the Terrier.

Though in general opposed to all avoidable mutilation of domestic animals, as being for the most part unsightly in its effects, and sometimes extremely cruel, we confess we are in favour of cutting off a portion of the tail, and circumcising the ears of the Terrier. If done at a very early age, it soon cures, and gives him, ever after, a more blood-like and knowing look, better suited to his vivacious temper and the nature of his duties, which demand extraordinary sharpness and rapidity of sight and action. Terriers often make excellent squirrel dogs, a sport, by the bye, which deserves more space in sporting annals than it has ever yet received. Who that has been "raised in the country," has not stored away among youthful recollections many scenes in squirrel, and hare, and raccoon, and 'possum hunting, to which memory likes to revert, and which he would delight. were it possible, to go back and re-enjoy.

It is well with the Terrier, while very young, not to let him encounter and be severely bitten by large Norway rats,—well-bred dogs have been spoiled by it. It is with dogs, as with other animals in this country,—there is too much reluctance to pay well for such as are of high blood. In England a thorough-bred stallion dog will command more for his services than a thorough-bred horse in Pennsylvania, and other parts of this country. Those who desire to keep every animal up to the highest mark of excellence, ought to encourage, by willingness to give liberal prices, establishments for breeding them.

An affecting instance of the sagacity of this breed of dogs is presented in the following scrap taken from a late English paper, the Kentish Gazette.

"On Tuesday evening last, Mr. Alfred Watts, the foreman of Mr. White, brickmaker, at Erith, went from home in company with his wife, and left her at the Plough at North-end with his brother, whilst he proceeded across the fields to inspect some repairs at a cottage. In about an hour after his departure, his dog, a small Scotch terrier, which had accompanied him, returned to the Plough, jumped up into the lap of his mistress, pawed her about, and whined piteously. She at first took no particular notice of the animal, but pushed him from her. He then caught hold of her clothes, pulled at them repeatedly, and continued to whine incessantly. He endeavoured also in a similar way to attract the attention of the brother. At last all present noticed his importunate anxiety, and the wife then said she was convinced something had happened to her husband. The brother and the wife, with several others, went out and followed the dog, who led them through the darkness of the night, which was very great, to the top of a precipice nearly fifty feet deep; and standing on the bank, held his head over, and howled in a most distressing manner. They were convinced that the poor man had fallen over, and, having gone round to the bottom of the pit, they found him lying under the spot pointed out by the dog quite dead, and weltering in his blood, having fallen upon his head. It was clear that from the darkness of the night he had mistaken the direction, there being no defined path, and by deviating about twenty yards, had walked over the precipice. The

deceased, who was perfectly sober at the time, was a steady and industrious man, and was much respected in the village. He has left a family of three children. An inquest was held on Thursday, when a verdict of 'accidental death' was recorded."

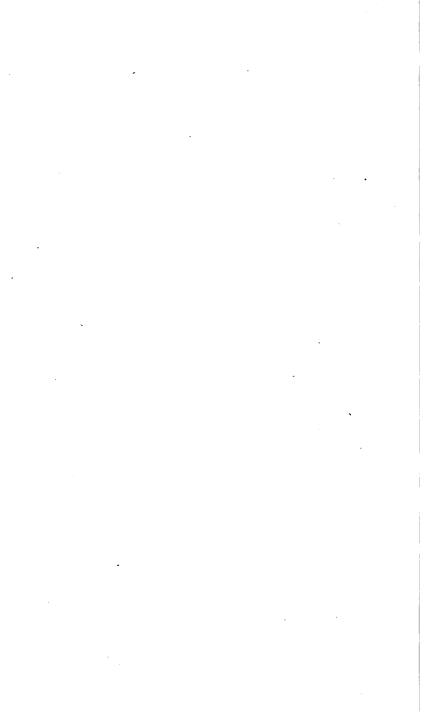
CHAPTER VII.

THE LAND SPANIEL OR SPRINGER.

This docile and beautiful species of the canine family is rarely found of genuine blood in our country, and where found, is kept more as a pet and parlour-companion for the lady, than as one of usefulness to the master of the house. We are persuaded that for pheasant and woodcock shooting, they deserve to be brought into more general use and esteem. The genuine sort is, or was, some years since, to be found at Carrollton Hall, descended from a stock given by the Duke of Wellington to Lady Wellesley, the accomplished granddaughter of Carroll of Carrollton. Mr. Keyworth, of Washington, D. C., has the breed also, in its purity.

"This name is generally applied to the springer, or small land spaniel, as the term setter is to the large land spaniel. There is a great variety of this beautiful little animal, all of which, however, are remarkable for their cheerful activity. They are not calculated for an extensive range, and are, therefore, very rarely used except for beating covers, in the pursuit of the pheasant or woodcock, and they give notice of their approach to the object by a sort of whimper, which increases to a bark as the game springs. They are affectionate and docile, and easily broken or trained: in fact, their whole system





of education consists of nothing more than merely to keep them tolerably close to the sportsman; since, if they are suffered to ramble out of gun-shot, the game rises at too great a distance, the object is thus defeated which they were intended to promote, and a mortification, much better felt than can be described, must inevitably ensue. Their beauty and affectionate disposition will always excite attention; but they are, after all, perhaps better calculated for coursing than the fowlingpiece, as they may be usefully employed in driving a hare from a copse or thicket, while a pointer, or particularly a setter, will answer all the purposes of pheasant or woodcock shooting. However, if sporting on a grand scale, and the utmost pinnacle of perfection, are the objects to be attained, let dogs be kept for the moors or grouse alone, others for the partridge, and the pheasant and woodcock consigned to the small land spaniel or springer.

> "See how with emulative zeal they strive! Thread the loose sedge, and through the thicket drive! No babbling voice the bosom falsely warms, Or swells the panting heart with vain alarms, 'Till all at once their choral tongues proclaim The secret refuge of the lurking game. Swift is their course, no lengthen'd warnings now Space to collect the scatter'd thoughts allow; No wary pointer shows with cautious eyes, Where from his russet couch the bird shall rise: Perhaps light running o'er the mossy ground, His devious steps your sanguine hopes confound; Or, by the tangled branches hid from sight, Sudden he tries his unexpected flight. Soon as the ready dogs their quarry spring, And swift he spreads his variegated wing, Ceas'd is their cry; with silent look they wait Till the loud gun decides the event of fate;

Nor, if the shots are thrown with erring aim, And proudly soars away the unwounded game, Will the staunch train pursue him as he flies With useless speed, and unavailing cries. No open view along the encumber'd field, To the cool aim will time and distance yield; But the nice circumstance will oft demand, The quickest eyesight and the readiest hand; Swift as he rises from the thorny brake, With instant glance the fleeting mark to take, And with prompt arm the transient moment seize, 'Mid the dim gloom of intervening trees. His gaudy plumage, when the male displays In bright luxuriance to the solar rays, Arrest with hasty shot his whirring speed, And see unblam'd the shining victim bleed; But when the hen to thy discerning view, Her sober pinion spreads of duskier hue, The attendant keeper's prudent warning hear, And spare the offspring of the future year.

Pyr.

"The interesting little dog now under consideration is a favourite in most countries; and has occasionally been much caressed by royalty itself. The chief order of Denmark, now called the order of the Elephant, was instituted in memory of a spaniel called Wildbrat, which had showed attachment to the monarch when deserted by his subjects. The motto to the order is, 'Wildbrat was faithful.'

"Charles II. was generally accompanied to the council by a favourite spaniel, and a particular strain of the spaniel breed is still distinguished by the name of this monarch. His successor, James II., manifested a similar attachment; and it is reported of him by Bishop Burnet, that being once in danger from a storm at sea, and obliged to quit the ship to save his life, he vociferated most impatiently—'Save the dogs and Colonel Churchill!'

"There is a circumstance noticed in early English history, which seems to prove that one of the landings of the Danes in England was occasioned by the sagacity and affection of a spaniel. Lodebrock, of the blood royal of Denmark, and father of Humbar and Hubba, being in a boat with his hawks and his dog, was unexpectedly driven on the coast of Norfolk by a storm, where, being discovered and suspected as a spv, he was brought to Edmund, at that time king of the East Angles. He made himself known to Edmund, who treated him with kindness, and with whom he soon became a great favourite. particularly on account of his skill and dexterity in the chase. The king's falconer became jealous of this attention, waylaid Lodebrock, murdered him, and concealed the body among some bushes. He was very soon missed at court, and the king manifested great impatience to know what was become of him; when his dog, who had stayed in the wood by the corpse of his master till famine forced him thence, came and fawned on the king, and enticed him to follow him. The body was found, and the murderer ultimately discovered. As a punishment for so atrocious a crime, he was placed alone in Lodebrock's boat, and committed to the mercy of the sea, which, it seems, bore him to the shore which Lodebrock had quitted. The boat was recognised, and the assassin, to avoid the punishment which awaited him, said that Lodebrock had been put to death by order of Edmund; which exasperated the Danes so much, that they determined on the invasion of England.

"The gamekeeper of the Rev. Mr. Corsellis was constantly attended by a spaniel, which he had reared; and

the faithful animal would leave him neither night nor day. Wherever old Daniel appeared, Dash was to be seen; and the dog was of great service to his master in his nocturnal perambulations. The game, at that season, the dog did not regard in the least, though no spaniel was more active in this respect in the daytime. night, if a strange foot had entered any of the covers, Dash, by a significant whine, informed his master of the circumstance; and many poachers were captured in consequence of this singular intelligence. After some years, old Daniel was seized with a disease which produced a consumption, and ended in death. During the progress of this fatal disorder, while old Daniel was able to crawl about, Dash regularly attended him; and when at length the old man was confined to his bed, the dog took his station at the foot of it. When death relieved the old man from his sufferings, the dog refused to quit the body, but lay upon the bed by the side of it. For some time the animal would take no food; and, although after the burial, he was taken to the hall and caressed as much as possible, yet he took every opportunity of creeping back to the room in the cottage where his old master breathed his last, where he would continue for hours; from thence he daily visited the grave, and, at the end of fourteen days, the animal died, having absolutely pined away.

CHAPTER VIII.

MAXIMS FOR SPORTSMEN.

Never let your dog have a will of his own; but impress upon him, from the first, that your command is to be the rule of his actions; and never allow him to ramble about the neighbourhood, alone, or at the risk of falling into bad company,—" Evil communications," &c.

Never take the field without your whip. It is the only legitimate weapon of punishment, and the sight of it may, in many instances, save the skin of your pupil. But never fight in a passion. He that would have a cake out of the wheat must "bide the grinding."

Never pass a blunder unnoticed, nor a fault unpunished; nevertheless, "love mercy." Keep your pupil down, under lecture, till you are friends again; then hey on!

Never permit a race after a hare. Therefore never be tempted to shoot at one which rises before your dog. In case of necessity, shoot her in her seat.

Never head your dog, nor let him trifle his time behind you; but keep him ahead in his beat, and go hand in hand with him up to his point.

Never hunt a dog when he is tired down, lest he be-

come a dealer in false points, and lose his gallantry of range.

Do not suffer your dog to ramble when going to, or returning from the field; but keep him strictly to your heel. It is not in the way of business.

MAXIMS IN FOX HUNTING.

When your hounds are at fault let not a word be said—let such as follow them ignorantly and unworthily, says Beckford, stand all aloof. *Procul*, O procul este profani.

When your fox is found, keep cool and let your dogs get well settled on the scent, qui bene cepit, habet.

In case of a loss, always give the hounds time to make their own cast. It's a rare case that justifies lifting hounds.

When hounds are in want of blood, wait for a good day, no matter how long, go early, choose a good quiet morning, and throw off where they are likely to find, and then kill if possible!

TECHNICAL TERMS WITH WHICH IT BECOMES ALL GENTLEMEN TO BE FAMILIAR.

A brace of Pointers or Setters.

A couple of Spaniels.

A couple of Fox-hounds.

Three and a half couple, (not seven hounds.)

A brace of Grouse.

A pack of Grouse.

A brace of Partridges.

A brace and a half, (not three Partridges.)

To raise or spring Partridges.

A brace of Pheasants.

A pack of Pheasants.

A couple of Woodcocks.

To spring a Snipe.

A wing of Plover.

e moremy

A pair-couple-a brace.

A covey of Partridges.

A pair is two united by nature; i. e., a pair of rabbits. A couple, by an occasional chain, as a couple of hounds. A brace, by a noose, or tie, as a brace of partridges.-A pair is a male and female; a couple two individual companions. A brace is two, at least, or three, tied together by sportsmen. mes the life In-process of the desired

a of evolution the state of some readers to a more than right maintage !-

choses and easy motion!

The following is an exact statement of the number of pellets contained in an ounce of shot of the following dimensions.

B. B.		4	4	-	contains	58	pellets.
B.			no.	-	- 46	65	66
No.	1.	÷	110	-	46	82	46
66	2.		(7)	-		112	46
66	3.	-	+10	4	- "	135	"
"	4.		171		"	177	44
					66		
					"		
					"		
66	8.				46	660	66
					"		

A USEFUL RECIPE, FOR SPORTSMEN AND ALL OTHERS, TO RENDER BOOTS AND SHOES WATER-PROOF, AND MAKE THEM LAST UNTIL THE WEARER GETS TIRED OF THEM.

From experiment of its efficacy we can recommend, above all we have ever tried, the following *Recipe* to prevent boots and shoes from taking in water, and to make them last.

The following extract from Col. Maarone's "Seasonable Hints," appeared in the Mechanic's Magazine, dated February 5, 1838.

After stating the utility of sheepskin clothing for persons whose employment renders it necessary that they should be much out of doors, he says,-"I will not conclude without inviting the attention of your readers to a cheap and easy method of preserving their feet from wet, and their boots from wear. I have only had three pair of boots for six years, and will want none for six years to come. The reason is that I treat them in the following manner:—I put a pound of tallow, and a pound of rosin into a pot on the fire; when melted and mixed, I warm the boots, and apply the hot stuff with a painter's brush, until neither the soles nor the upper leather will suck in any more. If it is desired that the boots shall immediately take a polish, dissolve an ounce of bees-wax to an ounce of spirits of turpentine, to which add a teaspoonful of lampblack. A day or two after the boots have been treated with the tallow and rosin, rub over them the wax and turpentine, but not before the fire-Thus the exterior will have a coat of wax alone, and shine like a mirror. Tallow, or any other grease, becomes rancid and rots the stitching, as well as the leather; but the rosin gives it an antiseptic quality which preserves the whole. Boots or shoes should be so large as to admit of wearing in them cork soles. Cork is so bad a conductor of heat, that with it in the boots, the feet are always warm on the coldest stone floor."

Last Branches

CHAPTER IX.

HABITS OF GAME BIRDS.

Mr. Castor, of Philadelphia, one of the most accomplished sportsmen on paper, or in the field which it has been our good luck to know, makes the following observations.

"As before premised, the reader will please recollect that the views of the writer are confined to the States designated, and as he presumes difference of climate and other causes must have an effect on game as well as other animals, would respectfully request some of your many capable and intelligent northern and southern correspondents to favour us with their observations on this subject.

"The partridge with us is rarely an object of sport until October, though it sometimes happens that early broods will be found pretty well grown early in September; and on the other hand, we find many more scarcely fledged in the month of October. As a rule, however, by which all are to be governed, the first of the month may be properly considered as the earliest day of the season, and the last day of December its termination. The birds themselves would seem to regulate its end; for after that time they are rarely to be found except in woods and very thick coverts or cripples,

affording but little opportunity to the dog, or amusement to the shooter.

"The woodcock is the earliest game bird we have, and about which there is more difference of opinion among sportsmen as to season than perhaps any other. think the 20th of June the commencement, and I find the author of the American Shooter's Manual names the first day of July; both I think premature, and agree with several of my sporting friends whom I have consulted. that if shot at all in the summer, it would be better to postpone the sport until the middle of July; by that time the birds become better grown, and acquire more of the true game flavour. If, however, gentlemen could restrain their inclination for this sport until autumn, when the birds shall have taken to the woods, and when one will nearly outweigh two killed in June or July, they would find birds more abundant, and less fatiguing to get at. I should remark that the laws of New Jersey fix upon the first day of July to commence the season.

"The pheasant, as we call him here,—partridge of the Northern States,—may be shot on the first of September, but it would be better to make their season to correspond with the partridge or quail, as he is called there and elsewhere, inasmuch as it frequently happens that in hunting the pheasant early in the fall, you will come upon those birds in an unfit state for the bag, and nevertheless, sometimes be unable to resist the temptation of giving them a crack, thereby setting a bad example to young shooters, and furnishing the irregular sportsman with an excuse, in your example, to continue in the detestable practice.

"Rail-shooting ought not to commence before the middle of September, and for one excellent reason, viz.:

they are entirely useless for any known purpose, being so wretchedly bare, that none but a connoisseur in bone eating, would think of troubling the cook with their miserable carcasses. Notwithstanding this fact, I am sorry to say, that some gentlemen of our city who are certainly well informed in all that pertains to genteel sporting, are terribly guilty of destroying these poor little birds by wholesale long before that period, for no other purpose that I can imagine, unless to have a convenient opportunity to examine minutely their anatomical structure, or to boast of the quantity of crime they may have committed.

"Grouse-shooting is regulated by the laws of New Jersey to commence on the first day of October, and to end with the last day of December; for the infraction of which considerable penalties are imposed. Nevertheless, as one of your correspondents, Mr. 'J. B. D.' of Philadelphia, a ten years grouse-shooter, tells you he has been in the habit of doing, many are shot by persons equally reckless of the laws of the land and of sporting propriety with himself, even in the month of August, and, perhaps, if the truth were told, before that time. It is to me no great wonder that he found No. 5 or 6 shot (provided he ever saw a wild grouse), would answer his purpose at that season, with birds half fledged, half grown, and as tame as chickens. For my own part, I have found early in October, that No. 3 was quite light enough, and should not doubt but that lower numbers would be advantageously used in November or December.* Independently

^{*} Mr. "J. B. D." has put himself at issue with the author of the American Shooter's Manual, in relation to the proper shot to be used for grouse. I leave that for him to settle. I can only say, that so far as my own experience goes, which is limited, no shot less than No. 4 can

of the violation of natural and statute law, other considerations should prevent the gentleman-sportsman from shooting these birds out of season. In the first place, they furnish comparatively but little diversion, and by breaking and destroying the packs at that time, the sport is diminished when the proper season arrives. And secondly, you are deprived of the satisfaction of bringing home your game as a treat for your family and friends, in any other than a putrid state. And again, what can be more degrading to a true sportsman, or a gentleman, than to be obliged to be on the alert whilst out shooting, for fear of encountering an informer, and to sneak home at night with his gun, dogs, game, and self, all concealed in a covered wagon, to prevent detection by the officers of the state, whose laws he has been violating?

"Deer-shooting. There is a wide difference in the legal enactments of the States of Pennsylvania and New Jersey on the subject of this species of game; in the former, the first of August commences, and the last day of December terminates the season; whilst in the latter, the season does not begin until the first of October, and ends as in Pennsylvania. From my own experience, and the better opinion of others, the first of September would be the most proper time to commence this sport. The laws of New Jersey too much circumscribe this amusement, inasmuch as the rutting season commences in December, at which time the bucks are of little value;

be used advantageously, even in September. And the most experienced all use lower numbers. Samuel A——s, of Mount Holly, who has killed more grouse than perhaps Mr. J. B. D., the author of the Manual, and myself, ever saw, uses No. 1, and single B.

and by the laws of Pennsylvania the deer is permitted to be killed before the fawns are sufficiently grown.

"The importance of an established rule in relation to this matter cannot be doubted; and when there are no laws to regulate this practice, nothing but example can produce any effect. We think that it behooves every real sportsman to refrain from doing any act which he would wish to be kept secret; and although there may be some speciousness in the excuse, that 'if I don't kill the birds now others will;' still, two wrongs can never make a right, and it is much better to refrain from the commission of an impropriety than to join others, whose only apology is the example you have set before them."

Quai C

CHAPTER X.

HABITS OF PARTRIDGES—GOOD SHOOTING, ETC.

"To the sportsman, I think nothing ought to be more interesting, and certainly nothing is more necessary, than a knowledge of the *natural history and habits* of the animal which he hunts. Of these, then, the common partridge claims the first consideration.

"These interesting birds break the covey (or pair off, as we more commonly express it), in the months of April and May, and when the spring is very early, as soon as March. They lay from twelve to fifteen eggs, and these generally in the months of June and July. The time of incubation is about the same number of days. Its nest is beautifully and judiciously built; generally under a hedge of grass, the rails of a fence, or by the side of an old stump. Its shape is a recumbent cone, opening to the horizon, and so well and closely constructed as to protect it on all sides from the weather. The early strength and activity of the chicks are remarkable. They generally move off the first day, and very often you will find the young with a part of the shell still attached.

"The hunting season commences with us about the first of November. Earlier than this, a number of them are found unfledged, and it affords but poor amusement

to the genuine sportsman to take them in this helpless state.

"Their daily habits, times of feeding, of resting, the fields and places which they prefer, are also interesting.

"They leave their huddle (the mode of collecting, or huddling at night, has interest: they all form an exact ring, or circle, with their tails pointing directly to the centre; and, of course, their bodies and heads coming out as radii, in which situation, they are prepared for any alarm), soon after the first dawn of day, and never without the most cheering little noise, (which seems to be general amongst them,) as if congratulating each other on the light of the new day. When these salutations are over, they run off feeding, (apparently the happiest creatures in the world,) and continue until about midday, when they again collect, roll themselves in the dirt, or sit about in the grass. They now do not ramble much until late in the afternoon, when they again commence feeding rapidly, until near the close of the day. If one should accidentally wander too far, or they should be scattered by the huntsman, they collect themselves again by rather a plaintive little whistle, answered from one to the other.

"The above is the course for a still and clear day; but rain, cold, and wind, always produce a variation. When raining, they travel but little, and when snowing never. They then generally shelter themselves under fallen bushes, or in the corners of the fence, or in thick broom sedge, or weeds. Cold and windy days they mostly keep close, not venturing far; and if they do, they seek a sunny hill-side, which protects them from the wind.

"Their places of feeding I have also observed. Grass

seed they prefer to every thing else. Can a field be found which has not been cultivated, nor much grazed for a number of years, and in which the grass and weeds have grown luxuriantly, there the sportsman may find much good shooting.

"They are very apt also to visit oat or wheat stacks once or twice per day; and, in the winter, when the seed become more scarce, you will generally find them around our wheat or rye fields, along the fences, or the adjacent branch, that they may feed upon the tender sprigs and have a ready covert to which they may flee in case of danger. They seldom venture far in the field; but, in very cold weather, when the earth is covered with snow, they become much more tame, through necessity, venturing to the farm-pens and barn-yards.

"We have delightful sport with them. During the last season we killed a great many. One day, Mr. I., Mr. G., and myself, rode to Mr. C's fields. Owing to delay, we did not reach it until eleven o'clock, (a bad hour,) and met with little success at first. We stayed but a few hours, and bagged fifty-six birds. Mr. I., this day, excelled beyond expectation. He fired forty-three times, killed thirty-eight birds, and wounded four, only missing clearly once. He used a double-barrelled flintgun, whirled and fired five times, with both barrels, in different directions, killed nine birds, and wounded the tenth. This is good shooting with us, and requires a ready hand and a quick eye. A party of us made a hunt, some time ago, and we bagged one hundred and forty-seven. Of these Mr. I. killed fifty.

"Our dogs, Cato and Ponto, behaved remarkably well throughout the season. They never flushed, and a straggler could scarcely escape. Cato is the best of

dogs. He has a slow, but regular lope, hunts remarkably close, and the powers of his nose would, if the various instances were related, seem incredible. When we would flush, he would always wait for orders as to the course he should go, and as soon as he found the bird was near, he almost invariably looked back at you, as if asking, 'are you ready?' and soon took his stand. He is a large dog, liver-coloured, with spots, and of untiring powers. Of his pedigree I know nothing, save this, that the sire and slut were both imported."*

*We are sorry and ashamed to have forgotten, if we knew, the real name of such an agreeable writer.

CHAPTER XI.

AMERICAN HARE-(LEPUS AMERICANUS),

Which is very commonly, but very improperly called rabbit. Indeed the hare and rabbit so much resemble each other, that we do not wonder that mere empirical observers should have been puzzled in assigning distinguishing marks of difference between them. There are many circumstances in which they differ, in reference to their reproductive system for example, which are sufficient to constitute them of very distinct species. Thus, the nest of the hare is open, constructed without care, and destitute of a lining of fur. The nest of a rabbit is concealed in a hole of the earth, constructed of dried plants, and lined with fur, which is pulled from its own body. The young of the hare, at birth, have their eyes and ears perfect, their legs in a condition for running, and their bodies covered with fur. The young of the rabbit at birth, have their eyes and ears closed, are unable to travel, and are naked. The maternal duties of the hare are few in number, and consist in licking the young dry at first, and supplying them regularly with food. Those of the rabbit are more numerous, and consist of the additional duty of keeping the young in a state of suitable cleanliness and warmth.

circumstances attending the birth of a hare, are analogous," says Dr. Fleming, "to those of a horse, while those of a rabbit more nearly resemble the Fox."

The American hare is found throughout this country to as far north as the vicinity of Carlton House, in the Hudson's Bay country. In summer the pelage is dark brown on the upper part of the head, a lighter brown on the sides, and of an ash-colour below. The ears are wide and edged with white, tipped with brown, and very dark on their back parts; their sides approach to an ash-colour. The inside of the neck is slightly ferruginous; the belly and the tail is small, dark above, and white below, having the inferior surface turned up. The hind legs are covered with more white than dark hairs. and both fore and hind feet have sharp-pointed, narrow, and nearly straight nails. In winter, the pelage is nearly twice the length of what it is in summer, and is altogether, or very nearly white. The weight of the animal is about seven pounds. It is about fourteen inches in length. The hind legs are ten inches long, by which circumstance it is most strongly distinguished, in external appearance, from the common rabbit of Europe.

The American hare never burrows in the ground like the common European rabbit. But in its movements it closely resembles the common hare of Europe, bounding along with great celerity, and, when pursued, resorts to the artifices of doubling so well known to be used by the latter animal. It is not hunted, however, in this country as in Europe, but is generally roused by a dog, and shot, or is caught in various snares or traps.

The kind provisions of nature for the preservation

of the leporine race, are many and wonderful, and afford a striking proof, among thousands which might be produced, of that system of compensations, that balancing of perfections and defects, that equalizing of the quantity of life and destruction, on which the continued existence of the respective tribes of animals depends. If the hare is, on the one hand, exposed to the attacks of almost every beast of prey, it is, on the other, abundantly fruitful. The American hare breeds several times during the year, and in the Southern States, even during the winter months, having from two to four or six at a litter. If often pursued, the hare is also furnished with various sources of eyasion and escape. Its ears are so contrived, as to convey even remote sounds from behind: the eyes are so situated as to enable it, when at rest on its seat, to observe without difficulty, and even without much motion of the head, a whole circle; and, though it sees imperfectly in a straight line forwards, it can direct its vision to whatever threatens it in the way of pursuit; and the eyes are never wholly closed during sleep. From the extraordinary muscularity of its limbs, it can sustain the fleetness of its course for a considerable time, while the greater length of the hinder legs gives it such a decided advantage in ascending, that, when started, it always makes to the rising ground. Its habitual timidity, and perpetual apprehension of danger preserves it lean, and in a condition the best adapted to profit by that speed which forms its security. thick hairy protection of its feet also gives it, in dry or frosty weather, an advantage over the dog which pursues Its near approach in colour to the soil often conceals it from the sight of man, and predacious animals; and in the northern countries, its fur becoming white, as we

said before, the animal can scarcely be distinguished from the surrounding snow. As if conscious of its resemblance to the earth on which it treads, it has often been known when closely pursued by the hounds, to squat behind a clod, and suffer the dogs to run over it, which they no sooner do, than it instantly takes a contrary direction, and thus deceives them. As it possesses the sense of smell in a pre-eminent degree, it is often aware of the presence of an enemy before it can ascertain its danger by the sight. The doublings of its course are familiar to every European sportsman; and though in some respects its sagacity seems to be at fault, especially in exhausting its strength in the early part of the chase, and in returning to its resting-place by the same paths, it has been frequently observed to have recourse to stratagems, which, in the human being, would bespeak not only presence of mind, but a prompt and practical application of the reasoning faculties.

During the daytime the hare remains crouched within its form, which is a mere space of the size of the animal, upon the surface of the ground, cleared of grass, and sheltered by some overreaching plant; or else its habitation is in the hollowed trunk of a tree, or under a collection of stones. It is commonly at the earliest dawn, while the dew-drops still glitter on the herbage, or when the fresh verdure is concealed beneath a mantle of glistening frost, says Dr. Godman, that the timorous hare ventures forth in quest of food, or courses undisturbed over the plains. Occasionally during the day, in retired and little frequented parts of the country, an individual is seen to scud from the path, where it has been basking in the sun; but the best time for studying the habits of the animal is during moonlight nights, when

the hare is to be seen sporting with its companions in unrestrained gambols, frisking with delighted eagerness around its mate, or busily engaged in cropping its food. On such occasions, the turnip and cabbage fields suffer severely, where these animals are numerous, though in general they are not productive of serious injury. However, when food is scarce they do much mischief to the farmers, by destroying the bark on the young trees in the nurseries, and by cutting valuable plants.

Although not very susceptible of strong attachment, the hare is naturally of a gentle disposition, and, when taken young, may be tamed without much difficulty. Shy and timid as it undoubtedly is in its native haunts, yet when domesticated it often assumes a forward and even petulant demeanour. In respect of temper and talent, however, a very marked diversity obtains among different individuals, a fact not sufficiently attended to in the moral history of animals, without excepting mankind, and which has been fairly exemplified by Cowper, in his account of three hares which he watched himself.

The flesh of the American hare, though of a dark colour, is much esteemed as an article of food. During the summer season they are lean and tough, and in many situations they are infested by a species of cestrus, which lays its eggs in their skins, producing worms of considerable size. But in the autumnal season, and especially after the commencement of the frost, when the wild berries are ripe, they become very fat, and are a delicious article of food. In the north, during winter, they feed on twigs and buds of the pine and fur, and are fit for the table throughout the season. The Indians eat the contents of their stomachs, notwithstanding the food is such as we have just mentioned. The flesh of the

hare was reckoned a great delicacy among the Romans, and, in Martial's estimation was superior to that of all other quadrupeds. From an allusion in the eighth satire of his second book, we may infer that Horace regarded the wing as the part in highest request among his countrymen.

Et leporum avulsos, ut multo suavius, armos, Quam si cum lumbis quis edit.

——— the wings of hares, for so, it seems No man of luxury the back esteems.

Though no animal can appear less formidable or repulsive to a human being than a timid leveret, it is somewhat remarkable that the brave Duc D'Epernon, from one of those constitutional antipathies for which it is so difficult to account, always fainted at the sight of one.

There are probably four species, belonging to the genus Lepus, which are natives of North America, viz.

- 1. The American hare, Lepus Americanus; L. Godman's Am. Nat. Hist. vol. ii. page 157.
- 2. The Polar hare, L. Glacialis; Sabin. Godman, page 163.
- 3. The Virginia hare, L. Virginianus; Harlan. Faun. Americ. pages 196 and 310.
 - 4. The Varying hare, L. Variabilis; Pallas.

CHAPTER XII.

THE SQUIRREL.

THE individuals belonging to the animal family of which we shall presently proceed to describe one species, are remarkable for the liveliness of their disposition, the quickness of their motions, and the general beauty and neatness of their appearance. They climb trees, and spring from branch to branch with astonishing agility. Some of them are furnished with hairy membranes, in the form of a lateral and expansile skin, which enables them to leap occasionally from one tree to another. But though, from this circumstance, they are called flying squirrels, they are incapable of keeping up their volant motion in the manner of bats. The tails of all the tree squirrels are very long, bushy, and light; having the long hairs so extended towards one another, as to render this appendage wider than deep. In the extensive leaps which the animals take from tree to tree, their tail seems to serve the same purpose which the feather does to the arrow; for it balances the body, and renders their motion through the air much more steady than it would otherwise be. The greatest number of the species live almost entirely in woods, and make their nests in the hollows of trees; others burrow in the earth,

and are, therefore, called ground squirrels. They live entirely on vegetable food; particularly nuts, and other fruits. When on the ground, they advance by leaps; and in eating, they sit erect, and hold their food in their fore-paws. Many of them may with care be rendered docile; but when irritated they attempt to bite. The skins of all the species are considerably valued as fur, and their flesh is a very palatable food.

The common gray squirrel is still very common throughout the United States, and was once so excessively multiplied as to be a scourge to the inhabitants, by invading the corn fields, from which it carries off and destroys a very large quantity of grain. Hence a pretty inveterate war is waged against it by the farmers.

Early in spring, the males of this species are observed to be particularly nimble and frolicsome, exhibiting wonderful proof of agility, while the females, like true coquettes, feign to avoid them by a variety of entertaining sallies. In warm summer evenings, they may also be seen playing their gambols among the trees; but they seem to dread the heat of the sun; for during the day they commonly remain in their retreats, reserving their principal excursions for the night. This retreat, or nest, is generally formed among the large branches of a great tree, principally oak trees, where they begin to fork off into small ones. Having selected the part where the timber is beginning to decay, and where a hollow may be more easily effected, the squirrel commences her operations by making a kind of level between these forks, and then fetching twigs, moss, and dry leaves, binds them so closely that they can resist the most violent storm. This part of the structure is covered on all sides, and has but a single opening at the top, just large

enough to admit the animal; and this opening is itself defended from the weather by a kind of canopy, formed like a cone, so as to throw off the rain, however heavy it may fall. The inside is soft, roomy, commodious, and warm. During cold weather the squirrels seldom leave their snug retreats, except for the purpose of visiting their store-houses, and obtaining a supply of provisions. It has been said that the approach of uncommonly cold weather is foretold when these squirrels are seen out in unusual numbers, gathering a larger stock of provisions, lest their magazines should fail. This, however, it has been again remarked, is not an infallible sign, at least in vicinities where many hogs are allowed to roam at large, as these keen-nosed brutes are very expert at discovering the winter hoards of the squirrel, which they immediately appropriate to their own use.

Like most of the animals belonging to this order, they are very prolific. The young are generally three or four in number, and are produced about the middle of summer, and sometimes earlier. The squirrel is extremely watchful; and it is alleged, that if the tree in which it resides is but touched at the bottom, it instantly takes the alarm, quits its retreat, and glides from tree to tree till it is beyond the reach of danger. For some hours it remains at a distance from home until the alarm has subsided, and then it returns by paths, which, to nearly all quadrupeds but itself, are utterly impassable. Owing to its wonderful activity, it is very difficult to take a full grown squirrel alive, but we have seen boys sometimes contrive to lay hold of it, by assembling in the woods, and pursuing the animal with loud noises,

and the barking of dogs, when it seems to lose its presence of mind, and falls to the ground.

The squirrel expresses the sensation of pain by a sharp piercing cry, and that of pleasure by a sound not unlike the purring of a cat. Besides, when teased or irritated, it occasionally utters a loud growl of discontent. It has been remarked that its gullet is very narrow, to prevent the food from being disgorged, in descending trees, or in leaping downwards. The species we are now describing, is remarkable among all our squirrels for its beauty and activity. It is in captivity very playful and mischievous, and is more frequently kept as a pet than any other. It becomes very tame, and may be allowed to spend a great deal of the time entirely at liberty, where nothing is exposed that can be injured by its teeth, which it is sure to try upon every article of furniture, &c., in its vicinity. It is curious, that in its wild state it satisfies its thirst only with the dew or rain collected in the leaves or the hollows of trees, but in its domesticated state it drinks freely, and a considerable quantity at a draught. In its wild state also, it feeds principally upon hickory nuts, chestnuts, and mast; in a state of captivity, it will eat a great variety of fruits, and other vegetable substances, and is delighted with sugar and sweetmeats.

The gray squirrel varies considerably in colour, but is most commonly of a fine bluish gray, mingled with a slight golden hue. This golden colour is especially obvious on the head, along the sides, where the white hair of the belly approaches the gray of the sides, and on the anterior part of the fore and superior part of the hind feet, where it is very rich and deep. This mark

on the hind feet is very prominent, and evident even in those varieties which differ most from the common colour. For some remarks on the apparent or supposed emasculation of the squirrel, we refer our readers to the American Farmer, vol. V.

There are, belonging to the genus Sciurus, at least twenty-nine species; we shall content ourselves with mentioning those only which belong to America.

- 1. Common gray squirrel—Sciurus Carolinensis. Gmel. Godman's American Nat. Hist. vol. ii. p. 131.
 - 2. Fox squirrel—S. Vulpinus. Gmel. Godman, p. 128.
- 3. Cat squirrel—S. Cinereus. Lin. Gmel. Godman, p. 129.
 - 4. Black squirrel—S. Niger. Lin. Godman, p. 133.
- 5. Great tailed squirrel—S. Macroureus. Say. Godman, p. 134.
- 6. Line tail squirrel—S. Grammurus. Say. Godman, p. 136.
- 7. Four-lined squirrel—S. Quadrivittatus. Say. Godman, p. 137.
- 8. The chickaree—S. Hudsonius. Forster. Godman, p. 138.
- 9. Red belly squirrel—S. Rufiventer. Geoff. Godman, p. 141.
- Ground squirrel—S. Striatus. Klein. Godman,
 p. 142.
- 11. Rocky Mountain ground squirrel—S. Lateralis. Say. Godman, p. 144.
 - 12. Louisiana squirrel—S. Ludovicianus. Curtis. The flying squirrel belongs to the genus Pteromys.

CHAPTER XIII.

HINTS TO SHOOTERS.

As I do not profess to teach the art of gun-making, it will suffice to recommend all, when intending to purchase a gun, to go to some respectable maker, and, after having described the calibre, weight, and any particular bend of stock that suits, to leave the minutiæ to him. For his own credit he will do all in his power to make the gun shoot well; and, if he cannot accomplish it himself, no instructions of an amateur will assist him. If a cheap gun will better suit his finances, let him endeavour to purchase a tolerably sound second-hand one of some good maker, rather than a new one of doubtful manufacture; for badly made guns are always dangerous, while it requires considerable wear to render one so that was originally otherwise.

We will suppose he has purchased one, or is about to purchase it, (for he should by all means try it first,) I will proceed to describe how it should be tried, in order to ascertain if it be as good as guns ordinarily are. I say ordinarily; for some few guns have accidentally turned out such extraordinary shooters as to defy the

art of the man who made them to make another equally good, and have been valued accordingly. Such a gun is now in the possession of Captain Ross. He gave upwards of one hundred guineas for it, although a pawnbroker would not venture to ask ten for it.

The first thing to be done is to examine the fittings of the lock, &c., whether the external workmanship be as good as the price demands; for of course a low-priced gun cannot be expected to be finished in as handsome style as one for which a top price is to be paid.

The action of the lock is next to be examined. withdrawing the cock, it should feel smooth and oily, and at the same time snap sharp and quick. No grating nor harshness should be felt, and the trigger should pull tolerably easy. The main spring of a detonator cannot well be too strong. The hammer, when on full cock, should be as close to the nipple as possible, so that no time may be lost after the trigger is pulled. This is not paid sufficient attention to by many makers, and therefore should be insisted on by purchasers. The cock may be allowed to look clumsy, rather than be left slight for the sake of appearance. The head or part that covers the nipple when down, I think should be solid, and not opened in front, as is commonly done. Those opened in front are liable to break, particularly when anti-corrosive caps are used. The nipple ought to slant so as to range with the line of the circle that the head of the cock makes when drawn up. If this is not attended to, it will be liable to fly off when struck with the hammer.

I say nothing of the tube guns, not having had much experience with them. They are troublesome to load and keep clean; and I have yet to learn what merit

they possess to counterbalance so great objections. The barrel should be free from flaws, and when held to the light, should show no shadows or waves. A good average length for a fourteen gauge, is two feet six inches, but some prefer it longer. The disposition of the metal is of more importance. It should run nearly the same thickness from the breech for about six inches. and then gradually taper off to the end. It is a bad practice to begin tapering from the breech, as the greatest strain on the barrel is where the charge first moves, or where the gun leads. Here also the wear is greatest, and in fact here it is that it generally bursts. Purdy and some others are now making their guns much stronger here than formerly. Let not this matter be considered trifling: it should be remembered that a gun is a dangerous weapon, even after every precaution, and will not therefore admit of any liberties being taken.

CHAPTER XIV.

PROPORTIONS OF FOWDER AND SHOT.

THE quantity of powder and shot which constitutes the correct load or charge for the fowling-piece, is a circumstance which ought to be duly impressed on the mind of every shooter, and to which. I am inclined to think, not sufficient attention is generally paid. On trial, it will be found that all guns shoot the strongest the first discharge, or, in other words, when they are perfectly clean, and that the force decreases in exact proportion as the piece becomes foul; hence the necessity of occasionally wiping out the barrel during a long day's shooting. There is also a certain proportion of powder and shot which will exactly suit every fowling-piece; and to ascertain this should be the first object with all new guns. If a piece be overloaded with powder, the shot will scatter very much, and but few pellets will strike the object; whereas, if an insufficient quantity of powder be used, the shot will not be driven with sufficient force. Yet, it is more than probable, that a trifling variation will be found in all guns; or, to speak more plainly, it will be a difficult matter to find two pieces, though of the same length and calibre, which require precisely the same charge. A very good method of ascertaining

the proper load for a fowling-piece is by firing at sheets of paper at given distances, and the progressive results will guide the shooter in the increase or decrease of either the powder or shot, or both.

On investigation it will probably be found, that the general error in loading the fowling-piece, is using too much powder, which not only very much scatters the shot, but renders the recoil almost insupportable,—it is quite a mistaken notion to suppose that a distant object will be better reached with a large load of powder, or that the force of the shot is thus increased; as it will be found, on experiment, that those pellets which strike the mark are not so strongly driven as when a reduced, but a correct, portion of powder is used, to say nothing of the scattering of the shot, by which a small object will generally be missed. Hence it is highly necessary that the correct charge should be ascertained, and uniformly adopted.

CHAPTER XV.

TOLING FOR DUCKS.

More than forty years ago, this curious mode of getting ducks is said to have had its commencement, near Havre de Grace, Maryland.

Tradition says the discovery was made by a sportsman, who, patiently waiting for a body of ducks to feed within gun-shot (as was then the only chance of getting a shot at them on the water), saw them suddenly raise their heads, and swim directly for the shore. On looking for the cause of this strange manœuvre, he found they were decoyed by a red fox playing on the shore.

An active, sprightly dog is generally selected for this service. They are taught from their infancy to run after small pebbles, and when taken to the shore, the sportsman, from behind his blind, throws stones up and down the shore, after which his dog runs. The continued action of the dog attracts the attention of the ducks, and they run into him. The only art necessary is to keep your dog in constant motion; a red colour is best, and a long bushy tail of great advantage.

There are few dogs which gain celebrity in this capacity; they generally become too fond of the ducks, and either stop to look at them, as they approach the shore, or lay down; in either case, your sport is spoiled.

The canvass-back and red heads are the best to tole, and they appear to be differently operated on. The former comes to the dog with head erect, sitting high on the water; and when near you has, if I may use the expression, a kind of idiotic look in the eye, whereas the latter are more sunk in the water, and appear unconscious of their approach to the shore.

Ducks act very strangely sometimes. I have seen a dog play without effect at one spot, when, by moving a short distance to another blind, the same ducks would run into him as fast as they could swim. At other times I have seen them take no notice of a dog, when they would run immediately in to a red silk handkerchief tied to the end of a ramrod, and kept in constant motion on the outside and in front of your blind.

To show you the value put on dogs, well trained to this sport, it was a custom, formerly, for the dog to get a share of the game equal with each sportsman, and I have often divided equally with the dog. There no doubt may be many amusing anecdotes related of this sport, and the quantity of blood shed in many instances is astonishing.

CHAPTER XVI.

FORM OF A SPORTSMAN'S JOURNAL.

Where killed.	When.	Partridge.	Pheasant.	Woodcock,	Snipe.	Ducks or wild fowl.	Hare.		Total each day.	Shots missed.	Remarks.
1	Mond.	4							_		
	Tuesd.		10	1				_			
antis	Wed'y.	111	-						· y	ù.	
	Thurs.	First 1	-	a						i	
1	Frid'y.	16				-	1		100	×	_
1919	Satur.	20					1		21		
metal:	Total.	-		-			·		-		3

The sportsman may add columns at pleasure for other game.

CHAPTER XVII.

THE FOX (C. VULPES).

The interest connected with the animal whose natural history we are now about to sketch, is of a very different order from that which we have discovered in the the horse and the dog. The fox is not the friend, but the enemy of man; as such we inquire into his history, to know his habits, detect his wiles, and to destroy him. In another respect, however, he is peculiarly interesting to the sportsman.

The fox, which, in numerous varieties of colour, and differences in size, inhabits all the northern and temperate regions of the globe, has a broad head, a sharp snout, a flat forehead, eyes obliquely seated, ears sharp and erect, a body well covered with hair, and a straight, bushy, and somewhat pointed tail. Its predominant colour is yellowish-red, or yellowish-brown; a little mixed with white or ash-colour on the forehead, shoulders, hind part of the back, and outside of the hind legs. The breast and belly are cinereous-gray, or whitishgray; the tips of the ears and the feet are black; the head is larger than that of the dog, in proportion to the size of the body; the ears are shorter, the tail much larger, the hair longer, and the eyes are more oblique. The intestines, too, particularly the cœcum, are more

capacious; and the cutting teeth of the upper jaw have no lines or furrows, like those of the dog and wolf. Another mark of distinction is its smell, which is very strong and offensive. It utters a yelping kind of bark, consisting in a succession of similar sounds, concluding with an elevation of the voice. In disposition it differs greatly from the dog; for it is tamed with difficulty, is never completely reclaimed, and is a stranger to the exercise of generosity and kindness. Yet, notwithstanding these points of discrepancy, it is a well-established fact, that the two species have been known to breed together under certain circumstances, and produce a mongrel race, (see Godman's Amer. Nat. Hist.) The females of this species produce only once a year and have from three to six young at a time. They are brought forth blind, and continue growing for about eighteen months. In its first year the fox is called a cub, in the second a fox, and afterwards an old fox. If the dam perceives that her place of retreat has been discovered, she carries off her cubs, one by one, to a more secure habitation.

The fox sleeps much during the day, lying like the dog, in a round form. Indeed, he may in some degree be considered a nocturnal animal; for in a strong light the pupil of the eye contracts, like those of the cat. In clear and very warm weather, he may sometimes be seen basking in the sun, or amusing himself with his fine bushy tail. Crows and other birds, that justly consider him as their common enemy, will often give notice of his presence by the most clamorous notes, and follow him a long way from tree to tree, repeating their outcries. The fox lives upon an average thirteen or fourteen years.

This animal, we need scarcely mention, is proverbially celebrated for his cunning; and, although this feature in his character has given rise to much exaggeration and fable, his proceedings are certainly more under the guidance of craft and subtlety than of courage. or a spirit of enterprise. He chooses his habitation amongst brambles, woods, and thick underwood, preparing his bed under hard ground, the roots of trees, or similar situations, where he can contrive proper outlets to escape from danger. He does not always take the trouble of making a hole for himself, but often procures accommodation by dispossessing the cleanly badger, which he is said to do by injecting his fætid urine into this animal's burrow. His lodge is seldom remote from the habitations of man, and often in the neighbourhood of some farmyard. He listens to the crowing of the cocks, and the cries of the poultry, scents them at a distance, selects his time with judgment, conceals his road as well as his purposes, slips forward with caution, sometimes even trailing his body, and seldom makes a fruitless expedition. If he can either leap over the walls. or creep in underneath, he ravages the yard, puts all to death, and retires softly with his prey, which he conceals under leaves, or carries off to his kennel. painting the confusion of a farmyard, when a fox had seized a favourite cock, Chaucer, with much humour, says:

"—— after him they ran,
And eke with stavis, many another man
Ran call our dogge Talbot and eke Garlond;
And Malkin with her distaffe in her hond,
Ran cowe and calfe and eke the very hogges.
The duckies cryed as men would tham kill,
The geese for fear flewin over the trees;
Out of the hives came the swarme of bees."

In a few minutes he returns for more, which he bears away or conceals in the same manner, but in a different place. In this way he proceeds systematically, till the progress of the sun, or some movement perceived in the house gives him warning that it is time to suspend his operation, and to retire to his resting-place for the day. He digs out rabbits from their warren, detects the nests of quails and partridges, seizes the mothers on their eggs, and thus destroys a great quantity of game. In procuring young rabbits from their burrows, he follows their scent above ground, till he comes to the end where they lie, and there scratching up the earth, descends and despatches them. In default of other victims, he makes war on rats, serpents, lizards, toads, and moles, of which he consumes a great number, and with which, like the cat, he plays before he devours them. When urged by hunger, he will also eat insects or roots; his drag is often struck upon at the root of the persimmon, where he goes to feed on the fallen fruit; if near the coast, he will seize on crabs, oysters, and other shell-fish. He manifests a predilection for grapes, and has been a destroyer of vineyards from the earliest times: "take us the foxes, the little foxes, that spoil the vines," it is said in the Song of Solomon. He is fond of sweet things, and will boldly attack wild bees to get at their stores. Assailed by swarms that fasten on him with their stings, he retires, but only for a few minutes, rids himself of his opponents by rolling on the ground and crushing all that stick to him, and then returns to the charge, and devours both wax and honey. Though sated with food, his active foresight will often prompt him to prolong his researches, less with the intention of discovering fresh booty than of exploring the details of

his future resources. Thus he frequently returns to the various holes which he had at first cleaned, surveys them with much precaution, enters into them, and slily examines their different issues. With cautious slowness he approaches objects that are new to him, and which. on account of their novelty, excite his suspicion and distrust. A favourite lure will ensnare him "in the days of his inexperience," but, when apprised of its nature, the same expedient becomes unavailing. He seems to smell the very iron of the trap, and carefully shuns it. If he perceive that the means of ambush are multiplying around him, he quits his place of residence, and retires into some more secure quarters. Man, with all his reasoning and machines, requires, himself, much experience, not to be over-reached by the prudence and stratagems of this wily quadruped. If all the issues of the kennel are beset with snares, the occupant scents and recognises them, and, rather than fall into them, exposes himself to the most cruel and protracted privation of food. This state of alarm in confinement is neither mechanical nor passive; for in the mean while, he leaves nothing untried to escape from dangers. has been taken by one leg, in the trap, he will break it with great resolution, and never cease his exertions to regain his liberty. Somerville thus notices the fact:

"—— by the indented steel With gripe tenacious held, the felon grieves, And struggles, but in vain; yet oft 'tis known, When every art has failed, the captive fox Has shared the wounded joint, and with a limb Compounded for his life."

In the fox, in short, as in the wolf, we cannot but remark an aptitude to acquire habits, and to be regulated by his reflections on existing circumstances. Where no war is waged against him, he is comparatively ignorant and careless of his conduct; but when the apprehension of pain or death, exhibited under various forms, has produced multiplied sensations, which become fixed in his memory, and give rise to comparisons, judgments, and inductions, he acquires skill, penetration, and cunning. If the imprudence and thoughtlessness of youth frequently make him deviate from the right path, the experience of age corrects his wanderings, and teaches him how to discriminate true from false appearances.

From the character which we have thus been led to ascribe to the fox, it is not much a matter of wonder that he should be persecuted by man; and that to avoid this persecution he should have recourse to all sorts of stratagem. But experienced huntsmen alone can know the various shifts to which he has recourse for salvation when hard pressed in the chase-how he will run his foil; leave his course to pass through a flock of sheep, or herd of cattle; or swim the water-course, and walk the top rails of the fence for many panels, to put at fault and confound his pursuers, often occasioning loss and perplexing difficulties, that nothing but the most sagacious old hound can unravel and "hit off." these stratagems, however, that create intense anxiety to the sportsman, and give variety and interest to the chase, the most manly, healthful, and at the same time useful sport, in which a gentleman can engage.

CHAPTER XVIII.

RUFFED GROUSE, OR PHEASANT.

This is the bird called partridge in the Eastern States, and pheasant in the middle, southern, and western. is a beautiful bird, nearly as heavy as the pinnated grouse, and is found, in more or less abundance, from Hudson's Bay to the Rocky Mountains. Unlike its congener, which is fond of open prairie grounds, the ruffed grouse seeks the thickest covers, mountainous regions, or hill sides. It is particularly fond of grounds covered with the balsam pine, hemlock, or laurel; is a very shy bird, and on this account difficult to shoot. Its favourite food is the same as that of the pinnated grouse; but its flesh is white, while that of the latter is black. During the severe snows of winter it feeds upon the tender buds of the alder and laurel, and of the apple tree, if orchards are in its vicinity. It will also feed upon the wild grape, particularly the small kind, called the chicken grape. It is in the best order for the table in September and October; but in the middle of winter, when its food is limited, its flesh is said, after it has fed some time on the buds of the laurel, to partake of the poisonous qualities of this plant, and to become a dangerous food. This is a common opinion in relation to the flesh of this bird; but I must confess that I have no personal knowledge of any bad effects from eating it at any season, nor have I ever met with any one who had.

It is a bird of some sagacity, and when overtaken in an open wood will allow a person to pass close to it; and when at a distance of ten to fifteen feet, will suddenly dart off in an opposite direction. And I have known it, when come upon, to dart off, and keep a tree between itself and the gunner until too far off to get a shot at it. This fact has been mentioned to me by others, and I am inclined to think it more than accident, not that I mean to say the bird is aware of the gun and its effects, but that it considers its safety to consist in keeping itself out of sight.

It is extremely difficult to get it to endure the point of a dog. He must approach with great caution, and be satisfied when within twenty feet. An old dog is the the best for this game. In September, however, when the young, though well grown, are yet with the hen, they will lay well. On these accounts, and the thick cover they generally resort to, few of them are shot with the usual game-dog, and the greater number brought to market are either taken in traps or shot when budding or eating grapes, by gunners lying in wait for them, or by the aid of a small barking dog, (King Charles or the cocking spaniel, or springer) that will tree them. The time they choose for eating buds or grapes is about daylight or after sundown. Those acquainted with the haunts of this bird seek out their places and shoot them as they arrive, which is usually one at a time. Though

sagacious in some respects, they are singularly stupid in others. Instances have been known of persons shooting several from the same tree, though all were there when the first was shot, by beginning with the one on the lowest limb, so that it would not disturb the others by its falling. It is a solitary bird, and after the young are weaned is seldom found in coveys.

It pairs in April and builds its nest in May, choosing a place on the ground, sheltered by the root of a bush or by an old log. The nest is made of dry leaves and grass. It lays from ten to fifteen eggs, nearly as large as those of a pullet; and the young leave the nest as soon as hatched, guided by their mother, who clucks to them like the common hen.

A celebrated naturalist has remarked, that solitary animals cannot be completely tamed, which I believe holds good with this bird, as I have never known an instance of one being domesticated, or seeking shelter in the habitations of man during the severest winters, which the quail will frequently do. But I once saw one of these birds in a cage, which fed well, and would admit the approach of one's hand without showing much uneasiness. Their eggs have been hatched under the common hen, but the young have in all cases, (within my knowledge,) taken advantage of the first opportunity to escape and abandon their foster-mother.

They are very fond of the steep declivities, thickly covered with evergreens, which so frequently characterize the banks of our running streams, and are also found abundantly in the heavy evergreen thickets, which so often cover our flat land streams. They lie in these grounds in numbers, but generally some feet apart, so

that but one is flushed at a time. But to find them in numbers, these grounds must be unfrequented and distant from habitations; and when the thicket is narrow, which is frequently the case, each side occupied by one or two sportsmen having well-trained dogs, very fine sport may be made on them.

CHAPTER XIX.

THE QUAIL OR PARTRIDGE.

This interesting game-bird is found all over our country, and in Canada and Nova Scotia. It is said to be migratory, and that it passes in winter from the Northern and Eastern States, and the cold regions of the Alleghany Mountains, to the sea-coast of the Southern and Middle States, and into the peninsula of Florida. It is not found in great numbers east of the Hudson and north of the Mohawk, but is extremely abundant in the Middle, Southern, and Western States. In a walk with dog and gun, of a mile to a mile and a half in Burlington county, New Jersey, I have frequently flushed from ten to fifteen coveys; and in the bottom-lands of the Potomac, above tide-water, I have found them so abundant as really to distract the attention of both dog and sportsman. I am informed that they are equally abundant below. They appear to congregate in such places from the more barren high grounds of the vicinity. I have also found them very abundant in the stubble-fields of the lower part of the Chesapeake and its tributaries. I once spent the months of November and December in the neighbourhood of Mobjack Bay, and found the fields there so well supplied with them, that hunting of them

lost some of its zest, for the want of the exercise and fatigue of the search.

I have never gunned for them in the Western States, but from the representations of others, their numbers there exceed any knowledge we have of them on the Atlantic.

Being entirely a granivorous and insectivorous bird, they suffer exceedingly in severe winters, when the ground is a long time covered with deep snow. not uncommon, after such seasons, when the snow has disappeared, to find entire coveys frozen and dead, in the positions they usually occupy when at roost. at such seasons, the difficulty of procuring food places them completely in the power of trappers, by whom vast numbers are annually destroyed. But another fertile source of destruction is, in robbing their nests and bringing their eggs to market. It behooves every friend of the delightful and healthy amusement which the hunting of these birds affords, zealously to discourage this most shocking practice, and every owner of a farm to prohibit his negroes from pursuing it, as it is only where negroes exist that I have found this practice pursued to a pernicious extent.

Fair and legitimate gunning cannot be said to be destructive of these birds, but in fact tends to their preservation. By scattering and dividing the coveys, the effect of frequent gunning on them, they are less injured by trapping, and afford from their divided state so little encouragement to trappers, that this method of taking them is nearly abandoned where gunning is actively pursued. These birds breed so abundantly, that it is not necessary that many should be preserved to keep up the stock. The gunner rarely destroys a covey, and when it becomes much reduced, seeks other ground,

by which a sufficient number to breed are always spared; but the trapper, on the contrary, as rarely avoids capturing the entire covey, and two or three heavy snows enable him completely to extirpate this bird within the limit of his operations. On this reasoning, I have been able to account for a singular experience, which, as it is the result of many years of observation, may be received as a correct general truth. There is a part of Burlington county, New Jersey, in which I have been in the habit of gunning for many years. Some of the farmers in this neighbourhood leave their grounds open to all gunners, after the season under the law has commenced; others place their grounds under an interdict. These open grounds, in consequence, are visited by more gunners, and yet it is a singular fact that birds are here always to be found, and the stock renewed every fall, and apparently increasing, and not a trap is to be observed. On the contrary, when I have obtained permission to hunt on these interdicted grounds, I have uniformly been disappointed, finding very few birds, but the remains of a trap in nearly every hedge. Were I, therefore, to propose a plan of preserving these birds, it would be by prohibiting the robbing of their nests, fixing the season of shooting them by law, and then permitting all sportsmen to gun for them as frequently as they pleased.

The quail builds its nest early in May, and is fond of a clover field for such a purpose. It usually seeks the shelter of a tuft of grass, and uses leaves and fine dry grass as materials for its nest. It lays from fifteen to twenty-four eggs, and many are of an opinion, that in the Middle and Southern States, it produces two broods a year. One thing is certain, that it is not uncommon in

New Jersey, Pennsylvania, Maryland, and Virginia, to find it setting about harvest, and I have frequently in October found the young not more than a third grown. The period of incubation is about four weeks.

They have never been domesticated. Their eggs have been hatched under the hen, and the young raised, and sufficiently tamed to occupy the barn-yard during the succeeding winter; but universally in the spring they would betake themselves to the fields, pair, and breed; and have never been known to return again to the barn-yard.

The American quail is much larger than the European, full a third, and breeds more abundantly. Endeavours have been made to transport it to Europe, particularly to England, but I have not understood with what success. They prefer dry and open grounds, will feed upon any grain, but are particularly fond of buckwheat, and I have thought that birds shot from the stubble of this grain, were of a very delicate flavour and remarkably juicy.

Considering its numbers, size, good conduct before the dog, and its delicacy as a food, it may be ranked as the most interesting of our game-birds, and particularly when we bear in mind, that the sportsman has not, as when after the snipe and woodcock, to seek for it in swamps and wet places. It is unquestionably the finest bird upon which to break a dog, and well trained on this, he may be trusted on any other game.

INTERESTING PARTICULAR IN THE NATURAL HISTORY OF THE QUAIL.

On the power given to the quail of withholding that peculiar odour which betrays it to the dog.

Wilmington, Del., Oct. 14, 1829.

Mr. Editor,

A close scrutiny of every subject in natural history discloses some marvellous power given to inferior creatures for their preservation from the hostility of man and his various and numerous agents. It is surprising how many striking facts are forced upon us for contemplation, before any doctrine is thoroughly admitted as truth. How long, for instance, has it been observed. and with regret by sportsmen, that the best dogs could not discover certain birds of value, such as quails, in places where they were seen to settle by themselves; and yet years have rolled away without a single individual advancing the only rational idea of the proper cause. The truth never reached them that these persecuted little creatures had been granted the power of withholding odour to preserve them from their ruthless destroyers. Noble dogs have been censured as wanting or careless, when the often repeated fact, in almost every day's hunt, made it manifest that the fault did not lay with them. Many years ago I noticed this fact, and after frequent and earnest observation I adopted the conclusion already given.

I will state some of my observations and experiments.

Precise dates are of no consequence, as the facts are general and open to the study of all who are interested.

It is now twenty years since I was, one day, in company with my friend and companion, the late learned ornithologist, Alexander Wilson, assisting him in his endeavours after the birds of this country. We encountered a well-appointed party of gentlemen who were shooting quails. They had seven dogs, apparently of the best quality. The party were in a large stubblefield, having small patches of low bushes and briars in several places. From one of these was flushed a very large covey of quails, which, after having been vigorously fired upon, settled nearly in the centre of the field, in a place slightly depressed, where the stubble was unusually high, with rank clover underneath. sportsmen pursued with due caution, giving the proper instructions and ample time to the dogs. Some of the birds were put up and killed, but not near as many as had taken refuge there. After considerable search the party left the ground. The deep interest I took in this (to me) new and animating scene, was the cause of my becoming a keen sportsman. Why so few of the birds were roused puzzled me exceedingly, and I, in common with every one, censured the dogs. Immediately adjacent to this stubble, was a body of open woodland, in which Mr. Wilson was several hours engaged in his usual ardent study into the habits and manners of a number of small birds sporting in it. On our return homeward we crossed the stubble, directly past the spot where the quails had been hunted by the sportsmen. As we approached it, a bird flew up, and soon after another, and another, until five went off. I expressed my surprise to Mr. Wilson, who dismissed the matter, by supposing, that the stronger scent from the feet of so many men had transcended that of the birds, and bewildered the dogs. Having been an anxious witness of the whole scene, I was not satisfied with this explanation, but believed the dogs to have been in fault.

After the lapse of a few years I became exceedingly given to field sports, and was in possession of several fine dogs. It often happened that my dogs could not find quails, even when I had marked the settle and conducted them to it, especially when the cover was of thick and matted grass. In 1821, I obtained a pup of high pedigree and took the charge of his education upon myself. No animal of his kind ever surpassed him; but even with him I was often unable to flush a scared quail. now first admitted the idea that these birds were endued with the occasional power of holding that effluvia which exposed them to their direst enemy. My remarks were general, but tended to strengthen the opinion I had adopt-For instance, I excursed very many times with large parties, where there might be said to be a pack of dogs, from their number, and most of them approved hunters. Often have I seen in large clearings five or six coveys of quails flushed, amounting probably to a hundred birds, and although scarcely a brace of them would leave the open ground, not more than a fifth part of them could be recovered. The sportsmen did not seem to me to think of the cause of their failure, and no one would disparage the truth of the charming Venuses, Junos, Dianas, and Coras, so sedulously engaged for his amusement. After such a field, I have made it a practice to return alone to it, after the lapse of sufficient time, and I always found that the birds had not left it; but that having resumed their natural or usual habits, were

easily flushed. In October, 1824, I became assured of the truth of my doctrine. I was then in company with five gentlemen in a fine quail country. We had eleven dogs (setters and pointers) of approved value. The party concluded to range a field or two before breakfast, but I did not go out with them. I soon heard very rapid firing in a new cleared ground, in sight of the tavern house. I hurried to join the sportsmen. There was a small strip of meadow-land, and a little brook intervening between us. On the margin of this meadow stood a large pine stump covered with running dewberry vines and surrounded by small oak shrubs. I was within sixty yards of it, and parallel to it, when two quails came directly towards me, across the meadow. Having but one barrel charged, I fired upon the nearest bird and killed it. The other made a sudden dart from its line. and took refuge among the shrubs and briars about the stump. I had my favourite dog and a very valuable pointer slut with me; having re-charged, I approached in guard upon the marked bird; but the dogs gave no poin. This was the proper time to test my belief. I therefore called off the dogs, and waited until I could have every one on the ground brought to the spot. This was done, but there was no intimation given that there was a bird near us. We left the ground without remark or explanation, and retired to breakfast. In an hour we took the field for the day. I requested the gentlemen to indulge me again by an advance upon the stump, leading the van myself with the pointer slut; she instantly pointed, and the other dogs backed her; the bird was flushed and shot. I now explained myself fully, and Mr. Edward Tilghman, well known to most American sportsmen, was greatly struck with it. He expressed

great pleasure too at it, as he said it would save many valuable animals from unmerited censure. He told me, moreover, that he had more than once noticed the same fact with partridge and grouse. I think it highly probable that these birds are endowed with the same power; but I have not had sufficient experience to speak of them with any certainty. Last week, in one of our steamboats, Colonel S. B. Davis, formerly of the United States Army, a great sportsman in his day, asked me, without any previous conversation on the subject, why the best dogs could not sometimes find a single quail in open ground? The fact was forced upon him, but he had not thought of the solution here advanced.

Yours, respectfully, SAMUEL B. SMITH, M. D.

CHAPTER XX.

WOODCOCK (SCOLOPAX MINOR).

This bird is well known to all our sportsmen. It usually begins to lay its eggs in April, but nests with eggs are frequently found in February and March, as far north as Pennsylvania. Its nest is made on the ground, and is composed of grass and a few dry leaves. It lays four eggs generally, but five have been found in its nest. In July they are considered sufficiently grown for the sportsmen, but it is not uncommon in that month to find many too young to be without the care of the mother, which is always indicated by the action of the old bird when flushed, called hovering. The true sportsman, in such cases, withholds his fire, and spares the imploring mother and her young.

It is found throughout the United States and Canada, and passes to the south as the winter approaches. I have found them in great numbers in South Carolina in January.

The female is larger than the male, but both are considerably smaller than the European bird of the same name, and are also of a different species. Those who have eaten of both kinds pronounce the American the more delicate.

I have never met with them elsewhere in as great abundance as in New Jersey. The extensive, wild, and wet meadows of that state, are favourite places of resort for them, during the drought so usual with us in July and August. They congregate in such places at those seasons, in numbers truly astonishing, and incredible to those who have not witnessed it. Here the sportsman may easily fill his bag, without greater risk than an occasional plunge, belly deep, into a mud-hole, which is not so much to be regretted, as it breaks in upon the monotony of killing, and affords a hearty laugh to his companions.

A great fault in sportsmen, on this as well as other birds, is the ambition of killing for quantity, which occasions them to protract their hunt until many of the birds are spoiled by the heat and delay. The sportsman should have a spice of chivalry in his composition; he should not be merely a wanton and reckless destroyer. He should always spare the hovering bird, and confine his efforts to others, to the number he can carry in order to his home, for his friends or himself. I have known this pernicious system of shooting for quantity pursued on the grouse, and to gratify the false pride of killing more than any other party, the time protracted until all the birds killed on the first day were spoiled and had to be thrown away. You should raise your voice against this growing and vicious ambition, and establish it as a rule among sportsmen, that credit should be given only for such game as each returned with in good order. Our Indians look upon this habit of the whites with the utmost horror. He kills and wastes, say they, without object; and riots over life as if it were a thing of no value. The game vanishes

from his desolating path, and the ground is covered by his destroying hand with that which he does not mean to use. The bounteous gifts of the Great Spirit are the mere objects of his wanton destruction.

We should redeem ourselves from this just reproach, and infuse some prudential consideration and moral feeling in our hours of sport.

The woodcock is easily killed; a slight blow will bring him to the ground. I have frequently looked in vain for marks of the shot upon their bodies, and have been led to suppose that young birds will drop sometimes from fright at the report of the gun, and allow themselves to be picked up.

They are juicy in July and August, but seldom fat. In September they are generally in bad condition; it is their moulting season, which lasts until about the 20th, when they are also very difficult to find. After about the 20th, they show themselves more abundantly, and improve in condition rapidly. In October and November they are in prime order, fat, juicy, and full-feathered; bold in their flight, and less firm to the dog. They leave also in these months, their usual summer haunts, and are found in clear woods with a damp soil well covered with grass. They are also frequently found late in November on the south sides of wooded hills, apparently basking or resting. On such occasions the sportsman must not lose a moment, as these are generally migrating birds, and are off by the next day, as I have experienced on more occasions than one.

Their food consists of worms, and the larvæ of insects. It turns over old leaves to draw the latter from its abode, and seeks the former in wet boggy ground by boring. I have never seen it in the act of boring, but I have been

told by several old sportsmen, that in performing this operation, it first strikes its bill in the soil, then raising on its feet, opens its tail and wings, and flutters round upon its bill as a pivot. When in full plumage it is a beautiful bird, and of an extremely mild and kind aspect. I have frequently felt something like remorse, when, on picking up a wounded one, I have met the forgiving expression of its full and bright, yet soft hazel orb. How many of the beauties who dazzle and enslave us, would be proud of such an eye.

CHAPTER XXI.

Turnated

GROUSE-SHOOTING.

Philadelphia, January 23d, 1830.

MR. EDITOR,

I have perused the numbers of your Sporting Magazine as they have appeared, without finding any thing in them relative to grouse-shooting. As I have been a shooter of this description of game for the last ten years, and considering it the finest sport in the game line that we have in this country, I am induced to give you a hasty sketch of my sport the present season, accompanied with a few observations. My hunting has always been on the coalings or barrens of New Jersey, though they are found in greater numbers in this State—the birds of the former, however, are always preferred.

My first trip was on the 20th of August, which, by the by, is more than a month before the season, (1st of October,) according to the laws of that State, but less than a fortnight (1st of September) of the time it should commence—even thus early I found them very wild, and cut up into pairs and small packs, by previous hunters, who live in the neighbourhood, and commence upon them by the 1st of August, or in fact whenever they are to be found, equally regardless of their total

extinguishment, or destroying a whole pack at a single fire, by killing a brooding hen. This at least should be remedied. Myself and companions, three in number, arrived at a cabin near the hunting-ground on the evening previous, preferring a night's rest to one of fatigue and travelling, that we might be fresh for the morning's hunt-in this last reasonable expectation, we were, however, defeated, by an old sow and her progeny, who, doubtless, had been deposed to make room for us, and by whom we were annoyed almost unceasingly during the night, and before it was light, sans ceremonie, was determined to be reinstated in their lost possessions, part of her family having actually taken a berth alongside of us in bed-if an old blanket spread on some straw, and our great coats for covering, can merit the name of bed. We were all hunters, however, and expected slim accommodations in this part of the country, nor were we disappointed. After an early breakfast and some twenty minutes' walk, we found ourselves by a little after sunrise on the grouse ground. The morning was cool for so early in the season, damp, and windy—and in a very little time General A.'s celebrated old setter dog Bone, indicated sport close at hand, and our other three younger dogs became very eager, but to no purpose, as we found, after sufficient time for ranging and giving them pretty much their own way, that the birds had flushed. We pursued our route, and soon after crossing some unfavourable ground and a slough, Mr. C.'s young dog Pan soon struck on a trail, and my dog Major, who had crossed to the windward about a hundred yards, had actually brought upthe other dogs immediately backing as they discovered him. Now, all was trembling anxiousness—we paused

a moment for the better self-possession, and then walked ahead of the dogs. The first bird to rise, which is most generally the case, was the pinnated cock, who was immediately knocked down by General A.'s first barrel—this always should be endeavoured to be done, as you then have a much better chance of success with the balance of the pack. Not a word was spoken-all grouse-shooters are aware of the necessity of silence when game is supposed close at hand—indeed at no time of the hunt should any noise be made—you may fire as often as you choose without fear of flushing the birds, but the moment your voice is heard they will flush. an instance in proof of this, a friend of mine last season but one, assured me that he had killed twelve birds out of a pack of thirteen, without picking up a bird till the last had rose, which he missed; therefore the necessity of having staunch and well-broken dogs in hunting them. There is not one young dog in fifty but that will ruin your sport in grouse-shooting. After his charging, we approached where we supposed the remaining birds to be, and soon flushed two more—both down—three barrels discharged. After re-loading, we continued to range this ground, but without any further success, it being no doubt the remains of a pack, and to which we gave the finale. We continued on through a very warm and oppressive day—the wind having lulled, and the sunbeams pouring down upon us, rendered it the most trying to one's nerve and bottom I ever experienced, and which can only be judged of by those who have experienced it,-with some fine trailing and standing at single birds, and most generally bagging them. being found thus singly, proves what I have before said of their being killed off so early in the season. When

we returned by the ground where, in the morning, we had been disappointed in sport-nor had we scarcely got on it, when old Bone (as tough as one yet, although thirteen years old), came to a full stop, with every nerve extended, and was soon backed by the others in the most splendid style—we walked in at once, without the morning's precaution of self-possession, as we had become somewhat accustomed to it by the day's sport, and flushed eight birds, almost at the same moment, a thing quite unusual, and only to be accounted for by their being so near each other, and preparing for roost. By the rapid discharge of six barrels, five were knocked down—the other three crossing a stream bordered by cedars, settled in a cripple beyond, some five or six hundred yards from where they were put up. We reloaded and pursued, but it had become too late to do any thing, and after putting up one bird, and that getting off, we gave it up for the night, after a hard hunt and bagging fourteen grouse. The birds were then drawn, although dark, and stuffed with a peculiar description of wet moss, procurable only near streams of cedar water: returning to the cabin of pig and progeny, and taking a wee drop and a hasty luncheon, (the first of the latter since morning,) we soon departed for a more comfortable lodging in a less forlorn neighbourhood-Burlington, N. J.

At this early period in the season you can have but one day's shooting, if successful, as no method with which I am acquainted will preserve the birds more than a couple of days; and for that length of time it is necessary they should be drawn, as before observed, immediately after they are killed, and packed in powdered charcoal. Early in the season, when found in

the savannah grounds, shot No. 5 or 6 is sufficiently large—later, when they are on high ground amongst the scrub oaks, shot No. 4 is the proper size.

The author of the "Shooter's Manual" recommends shot No. 3 and 4 early in the season, and No. 1 or single B. later. These sizes are much too large, and I doubt their ever being used as specified by him-or if ever used by him, proves at once what knowledge he possesses of this species of game. I am acquainted with most of the grouse-hunters of the day, and I doubt being able to find one that at any time of the season ever used larger than No. 3. In the same work it is stated, that "grouse always feed and fly down the wind:"—this is erroneous, as I have known the contrary in both cases. Indeed, in the latter, it depends entirely on the direction they are come upon and flushed, as they always either make a slight angle, or fly straight from you-nine out of ten cases the latter is the fact, the wind to the contrary notwithstanding. And when once they have got their usual elevation, the direction of their flight is seldom varied, without their being forced or frightened from it. This I know to be a fact from observation, and the experience of ten successive years hunting them.

Yours, respectfully,

J. B. D.

CHAPTER XXII.

THE SNIPE (SOOLOPAX GALLINAGO.)

This is the bird commonly called the English snipe, and also frequently the Jack snipe. It has a very strong resemblance to the common snipe of Great Britain, to which circumstance it is probably indebted for one of its appellations. It is smaller, however, than its European congener, which, with other distinctive marks, have induced naturalists to consider it a different species. It is very rarely found in Europe.

Like the woodcock, it is a bird of passage, and found in the Middle and Northern States only in the spring and fall, when they are frequently shot in great numbers. In the winter they frequent the rice-grounds of the south.

The history of this bird is somewhat obscure. We know not where it breeds, its manner of constructing its nest, the number of eggs it lays, or time of incubation. For although I have frequently shot them late in the season containing eggs with the shell nearly formed, I have never met with the young, or with any one who has, and have frequently heard it as a banter among sportsmen, Can you tell where the snipe breeds, or have you ever seen its young? it is known, therefore, with us, only as a bird of passage. Wilson furnishes no information on these points of its history.

Its irregular and zigzag motion on rising from the ground, perplexes the young sportsman exceedingly, and frequently baffles his efforts, and has occasioned this bird to be considered as difficult to shoot; but the more experienced, aware of its habits, wait until it has attained its elevation; when its flight is steady and direct, and it then becomes a certain conquest.

During the periods of its migration, it is found in all our wet, low, open grounds, is rather a shy bird, and I am inclined to think may be hunted more successfully without than with a dog. It bears his approach with extreme restlessness, and to be of any use to his master he must be slow and cautious, and satisfied with a distant point. The woodcock, on the contrary, particularly in the early part of the season, will frequently rest under his nose. This difference may, however, be accounted for by a difference in choice of ground. Each likes it wet, but the snipe prefers the meadow with a short grass; the woodcock, on the contrary, seldom takes to meadows where the grass is not long and the cover close.

THE

DISEASES OF DOGS.

In treating of the diseases of these animals, the companions and friends of man, the same order will be adopted that has been pursued in the pathology of the horse.

Of inflammation generally, it is unnecessary again to speak; and although there are many diseases which are connected with an inflammatory state of the brain, a case of pure phrenitis has rarely, if ever, been seen in the log; nor is there any thing that bears strict resemblance to either vertigo or apoplexy. That which comes the nearest to them shall be the subject of the first chapter.

CHAPTER XXIII.

COMPRESSION OF THE BRAIN.

This singular disease is thus characterized:—The dog is continually running round and round; and where he has liberty to do so he will continue this action almost from morning until night. He performs these incessant circles in precisely the same direction, and generally with his head a little inclined to the inside of the circle. At first he is conscious of surrounding objects; he stops for a moment when spoken to; but immediately afterwards he resumes his perambulations, carefully steering clear of every impediment in his way. After the first or second day, he usually becomes both blind and deaf, and yet still he marches round, blundering against every thing, and this he continues until he is fairly worn out, when he dies in slight convulsions.

On examination after death, there will generally be found pressure on some part of the brain, and on the side towards which the animal inclined his head. The nature of that pressure is variable. Spiculæ of bone have been seen pressing upon, and entering into the substance of the brain: sometimes effusion of blood on the brain has been found, and, oftener, an accumulation of serous fluid in the ventricles.

This is a disease which has been uniformly fatal, and the dog labouring under it should be destroyed. If, however, the veterinarian is urged to do something, his course is plain. He must first bleed, and that copiously, in proportion to the size of the dog. The medium quantity of blood to be taken away in the various diseases of dogs may be calculated at about an ounce for every three pounds of general weight. In such a case, a far greater quantity should be abstracted.

The jugular is the most convenient vessel for bleeding both in the horse, and cattle, and dogs.

Purgative medicine must next be given. The best physic ball for dogs is the following:—

RECIPE (No. 1).

Physic Balls.

TAKE—Powdered Barbadoes aloes, eight ounces;
Calomel, one ounce;
Antimonial powder, one ounce;
Ginger, one ounce;
Palm-oil, five ounces:

Beat them well together, enclose the mass in a jar, where it may be defended from the air by a piece of bladder, and give from three quarters of a drachm to two drachms, according to the size of the animal.

The bowels should afterwards be kept open by daily doses of Epsom salts; one or two drachms of which should be given rolled in silver paper, and divided into portions according to the size of the dog. A seton in the nape of the neck, and extending from ear to ear, is also clearly indicated; and, to prevent the exhaustion of the animal, he should be put into a basket, or box, in which he will be unable to perform these circumvolutions: he will then lay himself quietly down.

[A vein may be distinguished from an artery by its having no pulsation. If an artery of any consequence should be divided the blood will flow in irregular gushes, it will be difficult to stop, and may cause the death of the dog. However, there is little danger of such an unpleasant circumstance happening, and an ordinary degree of attention is quite sufficient to obviate it. The most convenient and best place to bleed a dog is to open a vein (the jugular vein) longitudinally in the side of the neck, around which a cord should be first tied. And if the sportsman is not expert at handling a lancet he may purchase a fleam at any of the shops where surgical instruments are sold, which, by means of springs, is so contrived that the greatest bungler need be under no apprehension. Those who sell this instrument will describe the method of using it; which, indeed, is so obvious, at first view, as to render elucidation superfluous in this place.

If, after the vein is opened, the animal should not bleed freely, pressure, a little below the orifice, will cause the blood to flow. When sufficient blood has been taken (eight ounces if a strong dog) the bleeding will, generally, subside. Should this not be the case, a little fur from a hat will stop it; or, the lips of the orifice may be drawn together with a needle and thread.

The vein should be opened longitudinally, as I have already observed; as, if opened in a transverse direction, it may be difficult to stop the bleeding, owing to the circumstance of the incision opening every time the dog holds down or stretches his head.

Caustic, or hot iron will stop a bleeding, even when an artery is divided; or it may be sewn up.]

RABIES-MADNESS.

This dreadful disease is comparatively rare in the horse, and when it does appear, it is usually propagated to him from the dog.

Rabies is said to be produced by improper food, by want of water, by hot weather, and by various other causes. It has but one origin, and that is inoculation. It is conveyed from one animal to another by the bite alone, or by the poison which resides in the saliva being received on some wounded or abraded surface.

The knowledge of this should teach the owners of all dogs a lesson of caution, and should check that foolish fondness for useless dogs in which so many indulge. The humane person will never ill use the animals which he has domesticated, and which are serviceable to him; but there is a foolish fondness for the dog, an endurance of his caresses, and his lickings—lickings of the hand and of the face, which places in continual danger the persons who can indulge in so absurd a habit; and the penalty of which many more than the public are aware of, have paid with their lives.

The dog that is becoming rabid is dull, disinclined for food, more than usually ill-tempered, fidgety, and discontented. If he is closely watched, there is usually some part which he is eagerly licking, or biting, or scratching. It is the place where he was bitten, and which now seems to be itching intolerably, or to give him very great pain.

Soon afterwards a very considerable change takes place in his whole appearance and manner, and it as-

sumes one of two forms. The eye becomes intensely bright and glaring; the dog is continually on the watch, and is tracing the fancied path of some imaginary object. He darts at every fly; he darts at many a thing that has no existence but in his own disturbed imagination; he makes the most violent efforts to escape; he gnaws his kennel almost to pieces. If a dog or a strange person comes within his reach, he flies at them with the greatest fury; sometimes he does not respect even his master; he seizes a stick when presented to him, and shakes it furiously.

He is in incessant action: he scrapes his bed under his chest: he disposes of it in a thousand ways, and yet is unable to make himself comfortable; and, every now and then, he lifts his head and utters a howl, altogether characteristic of the mad dog.

If he is enabled to effect his escape, he wanders hither and thither, seeking for victims; he surmounts every obstacle in order to get at them; he travels many and many a mile; yet he seldom worries or tears his prey; he gives one bite, and his object is accomplished. If he is not stopped in his career of mischief, and knocked on the head as a mad dog, he at length becomes wearied, and finds his way home, and curls himself up in his kennel, and sleeps away twelve or twenty-four hours; when, if he has the opportunity, he sallies out again in search of fresh objects.

His appetite is variable; sometimes he will eat his usual food, and at other times he cannot be tempted with it; but, almost always, there is a singularly depraved appetite: he eats his own excrement, laps his own urine, and fills his stomach with every abominable thing. His thirst is always increased, and when he can

get at water he drinks a most extraordinary quantity of it.

This stage of ferocity and danger lasts about two days; and then the brightness of the eye dies away—a film steals over it—the dog becomes weak—he staggers about—and dies four or five days after the commencement of the attack.

At other times, rabies assumes a very different character. The dog does not exhibit the slightest symptom of ferocity, or even of ill-temper, unless he is very much put upon; but there is the peculiar glare of the eye, yet expressive of anxiety and supplication; there is the same making of the bed, but not with so much violence; the same watching of imaginary objects, but no attempt to seize them. The dog recognises his owner and obeys him, and fondles upon him.

The lower jaw, after the first day, begins to lose its power of motion; the dog may be able to close his mouth by a violent effort, but he cannot seize and masticate his food. The jaw hangs down, and the tongue protrudes. There is the same thirst, but the poor fellow is unable to swallow: and he hangs over the water for a quarter of an hour at a time, plunging his muzzle into it up to his eyes, covering it with the spume which flows from his lips, yet unable to get a drop into the back part of the mouth. There is rarely any howl, but a harsh inward sound in the throat.

The disease continues about the same time; the dog becomes weak; he staggers; he loses the use of his hinder limbs; and dies without a struggle.

The appearances after death are different in the two varieties of the malady. In the first there is generally great inflammation about the back part of the mouth,

and the upper part of the windpipe; inflammation also in the stomach; and the stomach contains more or less of the strange substances of which mention has been made: in the latter there is less inflammation in the throat, and less also in the stomach; but yet sufficient to mark the disease, and the stomach usually contains a dark, blackish fluid.

Of the medical treatment of rabies in the dog little that is satisfactory can be said. If the animal is of extraordinary value, the owner may perhaps be forgiven if he endeavours to save him after he has been bitten. In that case he should be shorn from the head to the tail, and every wound and scratch well burned with the lunar caustic. He should then be securely confined for seven or nine months; for until the expiration of that time he cannot be considered as safe; and there are a few instances, yet fortunately only a few, in which the disease has appeared at a more distant period.

As to preventives, no dependence can be placed upon them, and it will generally be the duty of the practitioner to urge the destruction of every dog that has been bitten, or on which any suspicion can lie. Human life is far too valuable to be endangered; and, even after the most careful search, and the freest use of the caustic, there will always be a degree of apprehension and fear attending the keeping of such a dog, and a consciousness of not doing that which is perfectly right, that will materially lessen the pleasure that should otherwise be felt in having these faithful animals about us.

A practitioner is exposed to considerable danger in the examination of suspected dogs, and he may deem himself fortunate if he is not, at some time or other, bitten by them. The remembrance of this ought to render him cautious. But if he should be bitten, let him not make himself unhappy about it. The prevention of the disease is in his own power, and it will only cost him a little pain. Let him sharpen his lunar caustic to a point; and, if it is a superficial wound, apply it with some severity to every portion of the surface. If it is a punctured wound, let him be assured that he reaches the very bottom of it, and destroys every part that the tooth of the dog can have touched, and then there will be a perfect end of the matter. He may dismiss all fear—there is no absorption, or, at least, no immediate absorption in these cases; but, the surface to which the virus was applied being destroyed, all possible danger is destroyed with it.

This is not, and cannot, be the case with the dog; for even after he is shorn, some little scratch or abrasion may, and too often will, escape notice, concealed amidst the roots of the hair, and where the poison may still fatally lurk.

[An esteemed friend, Col. N. G., of Talbot Co., Maryland, to whose opinions we habitually defer, suggests rather as a question than a fact, whether Rabies, or Hydrophobia, has ever been known to originate with the female dog? With this doubt he couples the observation, said to have been made by late Commodore Kennedy, that in Turkey, where, he said, mad dogs are unknown, the sluts are never drowned or destroyed, as they are, for the most part, in this, and other countries where this awful malady takes place. The same gentleman, (Col. G.) is under the impression that dogs usually go mad in the extremes of hot or cold weather, when the streams of water are either dried, or frozen over. Thence he infers that madness may proceed from either

excessive carnal excitement or thirst! He queries whether it might not be well to emasculate the male pups in the proportion that females are destroyed; and humanely recommends that we never allow a dog to suffer for water, as doubtless they, as well as our horses, and other domestic animals, and even young children often do. The safest, and most humane proceeding is, when a dog is known to have been bitten by a mad dog, to destroy him at once. Emasculation leads to fatness; and imbecility, physical and mental. Every man of feeling will regard it as an extreme exercise of arbitrary power, to be stigmatized as a cruelty when not resorted to for obviously good and adequate reasons. The great equestrians Pepin and Brechard said they would never again undertake to educate a gelding for the circus, as they were found to be inferior in aptness and docility to the stallion and the mare.]

CHAPTER XXIV.

DISEASES OF THE EARS.

THESE may be divided into such as affect the external and the internal parts of the ear. .

Among those of the flap of the ear are,

ERUPTION AROUND THE EDGE OF THE EAR.

A scurfy roughness spreads around the edge of the ear, attended with a little thickening of the part, and intolerable itching. An eighth part of mercurial ointment should be added to the common dog mange ointment, and a little of the compound well rubbed into the ear morning and night.

RECIPE (No. 2).

Mange Ointment.

Take—Common horse turpentine, and
Palm-oil, of each a pound;
Train-oil, half a pint: melt them together, and when
they begin to cool, stir in
Flower of sulphur, three pounds.

At the same time, as this is usually connected with some mangy affection, a physic ball (Recipe No. 1, p.

138) should be given on every fifth morning, and an alterative ball on each of the intermediate days.

RECIPE (No. 3).

Alterative balls.

TAKE—Flower of sulphur, two pounds and a half;
Nitre, half a pound;
Ethiops mineral, four ounces;
Linseed-meal, half a pound;
Palm-oil, one pound:

Beat them all together, and keep the mass in a jar for use. In winter a little more, and in summer a little less, of the palm-oil must be used.

Huntsmen and gamekeepers are fond of the sulphur vivum, and use it instead of the yellow sulphur; but it contains little more than the earthy residuum after the sulphur has run through a crucible, except that it often contains some poisonous mineral, as arsenic.

Spaniels are most subject to this scurfy affection of the edge of the ear; pointers frequently have a more serious complaint.

CANKER ON THE EDGE OF THE EAR.

The pointer is always a fidgety, impatient dog; and if there is any thing about the face, or any little heat in the ear to annoy him, he will shake his head and flap and beat his ears without mercy. In consequence of this, a sore is produced on the edge of the ear, of a corroding nature, and which eats even through the cartilage, making a deep slit into it.

The sportsman having in vain tried many an applica-

tion in order to get rid of this, often proceeds in a summary way. He rounds the ear, i. e., he cuts off a portion of the flap, including the whole extent of the slit; and then he rounds the edges of the remaining part, in order to produce as little deformity as possible.

It is notorious, however, that this operation, which would seem to promise perfect success, fails much oftener than it succeeds. Possibly, care has not been taken to prevent the blood from flowing over the old wound, and then back again upon the new one, and so empoisoning the freshly cut edge: but, whatever be the cause, the sportsman sometimes has recourse to his rounding iron again and again, until he is tired of punishing the poor animal, or the dog has no more ear to lose. It is also to be observed, that the repetition of the rounding produces so much inflammation of the ear, that a worse species of canker is frequently set up in the internal part of it.

The principle on which the cure of canker is founded is the confinement of the ear, and the prevention of fresh irritation; therefore a cap must be procured which will reach round the head and tie under the jaw, and fairly include the ear. A running string must go along the side towards the face, and also that which comes behind the ear, while a shorter string is sewed in the centre. By means of these tapes or strings the cap may be tied securely over the head above the eyes, and round the neck behind the ears, and the flapping of the ear altogether prevented.

An ulcer of this character will require some stimulating application in order to induce it to heal.

RECIPE (No. 4).

Canker ointment.

TAKE—White vitriol; and
Alum, of each a drachm: reduce them to a fine
powder, and mix them with
Four ounces of lard.

This must not merely be smeared over the sore, or placed on it by means of a piece of lint, but gently, yet well *rubbed* into the crack.

Should this produce much inflammation and swelling, the application of it may be omitted for a day, and the healing ointment substituted.

RECIPE (No. 5).

Healing Ointment.

TAKE—Palm-oil, three pounds;

Resin, one pound: melt them together, and when
they begin to cool, add
Finely-powdered calamine, one pound:
Stir the mixture until the whole is fixed.

When the inflammation is thus subdued, the canker ointment must be again applied, unless the wound begins to assume a healthy appearance, and heals at the edges, in which case the healing ointment must be continued until the cure is complete.

It will sometimes happen that the caustic ointment, after being apparently used with advantage for some time, begins to lose its effect. It must be then changed for another application, equally stimulating, but of a different nature.

RECIPE (No. 6).

Stronger Canker Ointment.

TAKE—Nitrate of silver, one scruple;

Lard, one ounce:

Rub them well together.

This should be applied in the same manner, and succeeded by the healing ointment always. The cap should be worn for a few days after the ulcer is healed, for the part will be tender, and the dog will be apt to beat the ear about again, and make it as bad as ever.

EFFUSION BENEATH THE SKIN OF THE EAR.

This is a frequent consequence of the flapping and beating of the ears. A swelling will be observed on the inside of the flap, and extending sometimes from the tip to the base of the ear. It evidently contains a fluid. If it is noticed in its early stage, or if it increases very slowly, it may be worth while to attempt to disperse it by cold applications. Equal parts of vinegar and water will often be very useful for this purpose.

This course of treatment must not, however, be persisted in too long. If it is evident that the tumour, instead of diminishing, is continuing to increase, it must be opened, and the fluid evacuated. It will be useless merely to puncture with a lancet, for the orifice will close, and the swelling rapidly fill again. Either a seton must be passed through the tumour, or it must be slit up with a lancet from end to end. The latter is the preferable way. The black net-work lining of the

cyst—the secreting surface—must be carefully taken out, and three or four pieces of lint must be introduced between the lips of the wound, and extending into the cyst, in order to prevent the incision from closing before the sides of the cyst had begun to adhere. In the course of a few days they will adhere; the cyst will close up as far as the incision; and then the wound may be permitted to heal.

CANKER WITHIN THE EAR.

This is the most serious affection of the ears of dogs. The first symptom is shaking of the head, and perhaps carrying it a little on one side, and scratching with greater or less violence about the ear. On examining the dog, the projections about the base of the inside of the ear will be found to be a little more enlarged and a little redder than usual. The membrane lining the inside of the ear is inflamed.

Two or three fomentations with warm water, or with a decoction of poppy-heads, and a good dose of physic, will abate, if not remove this.

If the inflammation is suffered to proceed, there will soon be perceived, at the base of the inside of the ear, a dark red deposit; it is the blood which was effused by means of the intensity of the inflammation, the aqueous portion having evaporated. The dog now evidently suffers to a considerably greater degree than he did before.

A course of physic and alterative medicines (Recipes No. 1 and 3, pp. 138, 147) must now be commenced; and some local applications made to the ear, as well to

abate the inflammation as to prevent the oozing out of more blood. A decoction of poppy-heads or foxglove leaves will effect the first intention; and the redness having somewhat disappeared, and the heat abated, the following lotion should be used.

RECIPE (No. 7).

Mild Canker Lotion.

TAKE—Infusion of leaves of foxglove, half a pint;
Goulard extract, half an ounce;
Mix them together.

There is some art in the application of these lotions to the ear, and two persons are required in order to do it effectually. One of them must hold the muzzle of the dog with his right hand, having the root of the ear in the hollow of the left hand, and between the fore-finger and the thumb. The second person must then pour half a teaspoonful of the-liquid into the ear, when the first person, without quitting the muzzle of the dog, should close the ear, and gently mould it, until the liquid has insinuated itself into the interior of the ear, and disappeared there.

In a few cases, the disease will not yield to this treatment, or it will have advanced beyond the early and manageable stage before it is seriously attacked; and, instead of the reddish-black deposit, there will be ulceration at the base of the ear, and a discharge of matter from it. If the discharge is offensive, the ear should be washed out two or three times a day with a weak solution of chloride of lime.

RECIPE (No. 8).

Lotion of Chloride of Lime.

TAKE—Chloride of lime, a scruple; Water, half a pint:

Mix them together, and apply them to the ear in the manner described in the last Recipe.

The mild canker lotion should be tried first; and if that fails, the following one may be resorted to:—

RECIPE (No. 9).

Strong Canker Lotion.

TAKE—Goulard's extract, two drachms;
White vitriol, one drachm;
Alum, two drachms;
Water, half a pint.

This may seem to be an unchemical mixture, but it is an exceedingly good one. The principal ingredient in it, when compounded, is acetate of zinc, which could not be conveniently made in any other way.

Should the application of this give the dog very great pain, it may be lowered by adding four ounces more of the water; the seeming expression of pain, however, may be caused by the sudden application of a cold lotion to the irritable surface of the ear: therefore, before the fresh quantity of water is added, a little of the lotion should be warmed in a pewter or iron spoon held over the flame of a candle, and then poured into the ear.

If the case does not proceed satisfactorily, the principles of counter-irritation and derivation must be resorted to, and a seton must be passed across the poll, beneath the skin, and extending from ear to ear. This must be kept diligently turned, and the mucous discharge occasionally washed away in order to prevent irritation or excoriation. If the seton does not discharge well, it should be wetted every alternate morning with spirit of turpentine, or turpentine liniment.

The worst description of canker has not yet been described. Either the case has been neglected, or has not gone on well, and the projections which have been spoken of about the base of the inside of the ear have very considerably enlarged, and have blocked up the passage into the ear; and from one or more of them there has been a sprouting of fungous substance, sore, and discharging much ichorous fluid, which has irritated the inside of the flap of the ear, and rendered it one complete sore—the whole of the ear becoming a mass of disease.

In such a case, if the dog is old, he should be immediately destroyed, for the chances of a perfect cure are abundantly against him; and if a cure is effected, it must be at the expense of great and prolonged pain.

If the case is undertaken, the first object will be to heal the flap of the ear, which having become a continued sore, will be a source of much annoyance. The whole of the ear should be cleaned as carefully as possible with the chloride of lime lotion (Recipe No. 8, p. 153), and to which an equal portion of warm water has been added, after which the healing ointment (Recipe No. 5, p. 149) should be lightly smeared over the flap and the fungous substance at the base. This should be done twice or thrice in the day.

The flap being nearly healed, the nature of the fungus should be more carefully examined, and wherever it

may be possible a tight ligature should be drawn round the base of the principal mass and each separate brand, and which should be tightened every second or third day, until the fungus drops off.

This being effected, there will nevertheless be generally found an extensive ulcerated surface beneath. The mild canker lotion should be the first application here; but as soon as the ulcer can bear the stronger canker lotion without too great pain, it should be used, but beginning at first with adding double the quantity of water, and gradually increasing the strength of the lotion as the cure advances. A seton, and kept well stimulated, is essential here, and plenty of physic and alterative balls.

Deafness is the frequent result of this species of canker. There is no remedy in this case, for it is impossible to re-open the passage which has been obstructed by such a mass of morbid growth.

Deafness is occasionally congenital. It is hereditary in some breeds, and particularly in that of the white rough-haired terrier. The cause has never been ascertained, nor has any mode of cure been discovered.

[Formica.—Scab in the ears. A little mercurial ointment rubbed upon the affected parts, every two or three days, will, very soon, effect a cure.]

CHAPTER XXV.

THE DISEASES OF THE EYES.

THE first of these belongs to the eyelid, although generally accompanied by some inflammation of the eye itself.

ULCERATION OF THE EYELID.

When a dog has much mangy affection about him, it attacks various parts. One of the most painful and obstinate species is scurfiness, loss of hair, swelling, and ulceration of the eyelid. It is inflammation of the numerous little glands which secrete a fluid destined to keep the lids moist and supple during the waking hours, and to bring them in close approximation to each other during sleep.

This disease will not yield to any of the common mange remedies, but there is an ointment that will sometimes be effectual.

RECIPE (No. 10).

Ointment for Ulcerated Eyelids.

TAKE—Quicksilver, one drachm; Strong nitric acid, a drachm and a half;

Dissolve the mercury in the acid, and while the solution is warm add six ounces of melted lard. Stir them well together until they are cold.

Some of this ointment should be rubbed on the lids morning and night, care being taken that as little as possible gets into the eyes.

ENLARGEMENT OF THE THIRD EYELID.

The quadruped not having hands to ward off some dangers which threaten him, and to which the eyes are particularly exposed, nature has given him a movable membrane, situated within the inner corner of the eye, and which can be protruded at his pleasure, either as a defence to the eye, or to wipe off any temporary nuisance. It is sometimes called, on account of its function, the third eyelid.

The dog is more adroit in the use of his paws than many other animals are, and therefore this membrane is very little developed compared with the haw or membrana nictitans of the horse or ox. It is, however, far more subject to disease than the same membrane in either of those animals. A little dust or gravel sometimes insinuates itself within the folds of the membrane, and produces much inflammation and enlargement; or inflammation and enlargement arise from some unknown cause. The membrane projects at the inner corner of the eye so often as to prevent the lids from closing, while it becomes a source of very great annoyance to the poor animal. This sometimes occurs in common inflammation of the eye, and more particularly in the inflammation of distemper.

When the haw protrudes considerably from the corner of the eye, warm fomentations should be first applied, consisting of simple water or a decoction of poppyheads. If no diminution of size is thus obtained, cold applications, such as water, or a very weak solution of the extract of lead in water (in the proportion of a drachm to a pint), should follow; after which light scarifications with a very fine and sharp lancet should be tried; or, last of all, a small crooked needle, armed with fine silk, should be passed through the enlarged part, and by means of which the tumour may be drawn out sufficiently far to be neatly dissected out with a pair of scissors. Very little bleeding will follow, nor will there be afterwards any apparent inconvenience to the animal, and probably no very serious one.

WEEPING FROM THE EYE.

This is the usual accompaniment of inflammation, and will abate when the inflammation subsides; or, should it continue, and especially should a mucous discharge be established, the following wash will generally get rid of it.

RECIPE (No. 11).

Astringent Wash for Weak Eyes.

TAKE—White vitriol, four grains; dissolve it in Spirits of wine, half a drachm; and add Water, four ounces.

This may be applied several times in the day.

In some breeds, however, this weeping seems to be a natural defect of the eye. It is so in the Blenheim spaniel. Here another wash will be of more service.

RECIPE (No. 12.)

Wash for Eyes Naturally Weak.

TAKE—Laudanum, two drachms; add to it
Water, eight ounces; and preserve it for use.
This should be used every morning.

FISTULA LACRYMALIS.

There is a canal below the inner corner of the eye through which the superfluous tears flow into the cavity of the nose. When the tears are secreted too rapidly to be thus carried away, they run down the cheek, and they do so when this canal is obstructed. An obstruction may be caused in this canal by inflammation of its lining membrane, or by the introduction of a portion of hardened mucus into it. When an obstruction occurs. the upper part of the canal is evidently distended with the fluid. There is a soft tumour below the inner angle of the eye. This for a considerable time alternately appears and disappears, or the fluid may often be pressed down towards the nose, or upwards into the eye, by a little careful management with the finger. At length, from frequent distension, the membrane of the canal becomes diseased; it is ruptured, and an ulcer is seen below the eye. This is the fistula lacrymalis.

The ulcer, being once formed, will never be healed; it is the passage for the tears which nature has contrived, the true canal having been obstructed. The old canal can never be re-opened; we have no instruments sufficiently delicate for the purpose; or, if we had, we could not give the dog patience enough to wear them.

The practitioner, therefore, should confess at once the hopelessness of the case, and limit his directions to simple cleanliness.

INFLAMMATION OF THE EYE.

The dog is frequently subject to pure inflammation of the eyes. He seeks the darkest places—he is continually closing his eyes when brought into the light. The conjunctival membrane, whether covering the eye or the eyelid, is intensely red; and when the eye is looked into from above there is a red shade, showing how soon the interior of this organ is affected in the dog.

The practitioner should bleed and purge (Recipe No. 1, p. 138), and cause the eyes to be diligently fomented with warm water, or decoction of poppy-heads.

The inflammation being a little subdued, cold applications will be most useful, and they should be resorted to in something like the following order. The wash for eyes (Recipe No. 12, p. 159) should be first used; to this, after a few days, should succeed a weak solution of goulard (in the proportion of a drachm of the goulard to a pint of water); and, the eye having considerably improved, the astringent wash (Recipe No. 11, p. 158) may wind up the treatment.

Inflammation of the eyes is more or less connected with some other diseases, and the practitioner forms a tolerably accurate opinion of the intensity of those diseases, and the probability of cure, by the appearance of the conjunctival membrane. In epilepsy the dog has little chance if the eye is very red; in pneumonia, and in distemper, he augurs badly if the conjunctiva is much

injected; while he scarcely fears any disease so long as the eye is clear, and of its natural colour.

Inflammation of the eye takes on a peculiar character in distemper. It is far more intense than when that organ alone is the subject of disease; it speedily runs to ulceration, and that of the most dreadful character, and which quickly eats through the cornea and permits the aqueous humour to escape, while numerous fungous granulations spring from the edges of the ulcer.

The practitioner will not forget the state of the eye; he will touch the granulations with the lunar caustic, and endeavour, by the use of the proper means, to abate the inflammation; but his principal attention will be directed to the malady with which this affection of the eye is connected; and if he can subdue that—if the dog lives, and recovers his usual strength—the ulcer will heal, the cloudiness disperse, and scarcely a trace of all this mischief will be left behind.

CATARACT.

This is one of the terminations of inflammation of the eye. It is opacity sometimes of the membrane covering the crystalline lens, but much oftener of the lens itself. The dog is peculiarly subject to cataract. The majority of old dogs become blind from this cause. Nothing can be done, even from the commencement of the obscurity of the lens, for the part is too deeply seated for our applications to reach it.

GUTTA SERENA.

This is another (somewhat unfrequent) cause of blindness in the dog. The eye itself is perfectly clear, but the retina—the expansion of the optic nerve within the eye—is paralysed, and consequently insensible to the impression of light. There are a few instances of the successful treatment of this species of blindness.

Much depends on the cause of it. If it is the consequence of violence, it never can be cured. If it has come on very slowly, little good can be expected; but when it appears unaccompanied by other disease, there may be some slight hope. A strong emetic may be given, followed by an active purge. The emetic should be repeated on the third day, and the bowels kept in a state of purgation. A seton should be inserted in the poll, and, if the dog is fat, a moderate quantity of blood should be taken away.

The purgatives should be continued, united with tonics, and the best tonic in this case is the chamomile.

RECIPE (No. 13).

Tonic Ball for Gutta Serena.

TAKE—Powdered Chamomile-flowers, one ounce;
Powdered rue, half an ounce;
Ginger, two drachms;
Palm-oil, seven drachms:

Beat them well together; divide them into twelve, sixteen, or twenty balls, according to the size of the dog, and give one morning and night.

DROPSY OF THE EYE.

In consequence of inflammation, the eyeball will sometimes become more than double its natural size. It will be cloudy, the different parts of it confused, and the sight gone. Nothing should be attempted to be done, except the dog is evidently suffering much pain from the distension of the eye, and then it may be punctured with a lancet, and the fluid evacuated. It is seldom that much inflammation follows this operation, nor does the dog express any great degree of pain, but the eye will afterwards dwindle almost entirely away.

FROTRUSION OF THE EYE.

This occasionally happens from the bite of a larger dog. The eye is forced out of the socket, and the lid contracts around it, and prevents its return. If the accident has not occurred more than a few hours, a little patience and adroitness will accomplish the return of the eye, and with a fair chance of preserving the sight.

The part must be gently but well cleaned, and a small stream of warm water made to run on the eye, and the parts around, for more than a quarter of an hour. The object of this is to relax the muscles of the lids and the cellular substance surrounding the eye. The blunt end of a small curved needle must then be dipped in olive-oil, and inserted between the edge of the eyelid and the parts on which it is powerfully contracting, and, having been removed once or twice for the purpose of being

armed with more oil, it must be carried fairly round the eye, and between it and the lid.

A somewhat larger crooked needle is now to be taken, that the purchase may be greater. The blunt end must be introduced between the eye and the lid, about the centre of the upper lid, and the lid elevated with some degree of force, and attempted, by means of the curve of the needle, to be drawn over the eye, which, by a firm pressure on it with the moistened fingers of the other hand, is attempted to be pushed inward, and rather upward. In a great many cases this will be accomplished much more easily than would be deemed possible.

If the practitioner does not succeed with the upper lid, let him try the lower one, but let him not torture the animal too much. The pressure of the needle on the irritated conjunctival membrane causes extreme pain, which the dog plainly enough evinces.

If the return of the eye in this way is impracticable, the upper lid may be lifted once more at the centre, for it is there only that it can be got at, and with a pair of scissors, snipped as deeply as possible. This will put an end to the muscular contraction of that lid, and enlarge the aperture, and the eye may now be returned without much difficulty. The eye having regained its place, the divided edges of the lid must be brought together and retained by two or three stitches inserted by means of a small straight needle and waxed silk. A great deal of inflammation is apt to follow this last kind of operation. The eye had suffered severely enough before, and will not bear this new irritation.

It will therefore be a point of duty and humanity to consider, when more than five or six hours have passed

since the accident, and the eye cannot be returned by the first method, whether the practitioner should not proceed to the

EXTIRPATION OF THE EYE.

In the present case this is a very easy thing to accomplish. The assistant should press down the lid as much as possible around the eye, and the operator, taking the eye in his left hand, and pulling it slowly but firmly forwards, should cut through the nerve, and adipose and other substance, with one stroke of his scalpel, the division being made as closely as possible to the lids without wounding them.

The bleeding will not be considerable, and will be easily checked. The eyelids must be opened, and a little very soft lint introduced into the cavity, not sufficient in quantity to press painfully on the tender parts within, yet enough tolerably to fill the hollow when gorged with blood. A piece of linen, or a cap contrived for the purpose, must then be securely tied over the eye, and the patient dismissed with a dose of physic. On the following day the lint may be removed from the socket, and not in one case in twenty will there be any after bleeding. The blemish will be considerably less than if the eye had been forcibly returned, and the sight destroyed.

FILMS IN THE EYE.

Bathe the affected part twice a day with water in which a little vitriol has been dissolved, (the size of a

large horse-bean to a pint of spring water,) and, in a minute or two, wash it in clear water.

Or, bathe it with the following lotion twice a day:

Sulphate of copper, one scruple; Water, four ounces,

Or, bathing the forehead and eyes externally with tarwater, very profusely, has an excellent effect in all cases either for horses or dogs. It was much used in Hospital practice, by the late Dr. Physick of Philadelphia. In this case there is no danger of injury by making it too strong.

CHAPTER XXVI.

THE TONGUE.

THERE is the same vesicular inflammation of the tongue in the dog which has been described (page 67) as found in the horse. The dog will not eat, he will not or cannot open his mouth, and he resists the attempt to open it with all the strength he has; a great quantity of saliva is running from his mouth; and he has a peculiarly anxious look. It has been mistaken for locked-jaw, or the commencement of rabies.

The swelling in the horse is usually confined to the tongue. In the ox it sometimes spreads over the whole of the face and neck; and in the dog the cheeks and the whole of the mouth are involved.

On opening the mouth the cause of all this is plainly seen. A red or dark-purple bladder extends along the side of the tongue, and more under than in other animals.

The same lancing from end to end, the same washing of the mouth with tincture of myrrh while the wounds are healthy, or with the solution of chloride of lime when they become fœtid, will speedily set all right, especially if one or two doses of physic are given.

This, perhaps, is the proper place to refer to the pre-

vailing opinion of the advantage derived from worming dogs. They are supposed to be broken of their propensity to gnaw every thing within their reach, and to be in a manner secure from becoming mad; or, should they be rabid, it is said that they will never bite.

All this, however, is perfectly fallacious. No dog was ever broken of his trick of gnawing things by the operation of worming. He will have a sadly sore mouth for a few days, but when that gets well he will gradually become as mischievous as ever.

As to worming preventing the dog from biting when rabid, it is hard to conceive how the removal of a little dense tendinous substance enveloped in the folds of the frænum, or bridle of the tongue, and destined to assist the tongue in the act of lapping, can have any thing to do with rabies.

The plain fact, however, is, that worming is no preventive either against the disease, or the disposition to bite when under its influence.

CHAPTER XXVII.

THE TEETH.

The full-grown dog has twenty teeth in the upper jaw, and twenty-two in the lower one. The central front teeth and the tushes pierce the gums before, or very shortly after, the birth, and the others protrude very rapidly. They remain only a very short period compared with the horse or with cattle, for by the time he is four or five months old the mastiff has all his permanent teeth complete, but the teething of the spaniel is not over until he is seven or eight months old.

The teeth preserve their freshness and whiteness until the dog is twenty months or two years old, when they begin to be tarnished, and the feur-de-lis shape of the front teeth is changed to a more rounded one. This is hastened or retarded by the general health of the dog, and by the kind of food on which he lives, so that there is nothing about them that will indicate the age with any degree of certainty. The dog of five years old, who has plenty of exercise, and is fed on soft meat, will have a mouth full two years younger than another who has been in constant confinement, or who has been fed on bones; and the difficulty of judging of the precise age increases every year. In the general course of

things the middle front teeth of the lower jaw begin to be rounded in large dogs at sixteen months, and in smaller dogs at between twenty and two-and-twenty months, and the central lobe of the *fleur-de-lis* is gone, and the whole of the edge is level, at between three and four years old.

The same process commences in the next incisors between two years and a half and three years, and terminates between four and five; and in the corner front teeth it commences at four years, and is completed at five. The wearing away of the upper front teeth begins at a later period, and that has not been so carefully noted.

The tushes do not generally appear to be rounded until the front teeth are more or less changed, and they longer retain their freshness of appearance. The indications of age in them are vague and variable, and depend still more on the habits and food of the dog than do those of the other teeth.

The diseases of the teeth of petted dogs are often difficult and disgusting to treat. Before the inmate of the drawing-room becomes three years old, tartar begins to accumulate round the roots of many of the teeth. While it grows downward on the teeth, it also presses upward against the gums, and inflames and corrodes them, and the breath becomes offensive.

If the case is now neglected, the dog soon becomes a perfect nuisance to all about him. The tartar will be collected thickly about the teeth; it will eat deeply into the gums; it will form extensive and fætid ulcers on the inside of the lips; many of the teeth will become loose, or drop out; and the breath of the animal is absolutely poisonous.

As a local application, healing the gums and sweetening the breath, equal parts of the tincture of myrrh and water will be most excellent. It should be daily applied until the cleanness of the teeth, and the healthiness of the gums, show that the evil is got rid of. A weak solution of the chlorides of lime and soda will also be found very useful for removing the present fætor; but they must not be continued longer than is necessary, for they are of a caustic nature, and corrode and destroy the enamel.

CHAPTER XXVIII.

INPLAMMATION OF THE MEMBRANE OF THE NOSE.

THERE are two affections of the membrane of the nose that deserve mention. The first is a peculiar violent spasmodic snorting noise, made with the head extended, and the nose protruded and pointing a little upwards. It will occasionally last for two minutes, or more, until the dog seems to be giddy, and staggers or falls; sometimes it terminates in a fit of sneezing: it is rarely connected with any degree of cough. It is coryza—inflammation of the membrane of the nose.

The only medicine that will have the slightest effect upon it is an emetic; and the best emetic for the dog is the following:—

RECIPE (No. 14).

Emetic Powder.

TAKE—Calomel, and
Emetic tartar, one ounce each;
Red sulphurate of mercury, ten grains:
Rub them well together.

The dose will vary from one to three grains of the powder, according to the size of the dog; and the best way to give these emetics is either to open the mouth

of the animal and shake them on the tongue, or to mix them in a teaspoonful of milk and force this on the dog.

The mildest emetic (one grain) will usually answer here, and it should be given every third day until the animal is relieved.

The second complaint is a purulent discharge from the nose similar to that which accompanies one stage of distemper. Old dogs are very subject to it, and particularly old pugs. It is occasionally a discharge of simple pus, without much discoloration or smell; but at other times it is of almost all colours, and stinks insufferably. It is probably ulceration of some of the small bones of the nose, and there is no cure for it.

CHAPTER XXIX.

INFLAMMATION OF THE GLANDS, AND OF THE CELLULAR SUBSTANCE BENEATH THE THROAT.

PHLEGMONOUS SWELLING OF THE THROAT.

Dogs are very subject to swellings of the neck, of various kinds. Sometimes, on the lower jaw, or on the side of the throat immediately beneath it, a tumour suddenly appears, at first quite circumscribed, but gradually becoming more diffused, running up the cheek, and almost closing the eye, and occupying the throat so as to prevent the opening of the mouth. It is hot and tender, and the dog is evidently suffering acute pain.

After a day or two's fomentation, it will point decidedly at some part at which it should be opened with a lancet. The quantity of fluid which some of these abcesses contain is astonishing. More than a quart has been taken from a large dog.

The fomentation should be continued until the swelling has run itself out, care being taken that the dog is not permitted to get at the part and to scratch it. If a tumour of this kind is suffered to break, or the dog tears it open, or scratches it after it has been opened, a ragged ulcer will be formed which it will be difficult to heal. The best application for such an ulcer is the common tincture of aloes:

RECIPE (No. 15).

TAKE—Barbadoes aloes, powdered, eight ounces;
Myrrh, powdered, one ounce;
Proof spirit, two quarts;
Water, one quart:

Let them infuse for three weeks, shaking them well daily.

ENCYSTED TUMOUR OF THE THROAT.

There is sometimes a tumour of a very different kind placed in the front of the throat. It is usually found on, or a little below, the thyroid cartilage, between the skin and the cellular substance beneath. From the beginning it is soft, and plainly contains a fluid. Its progress is uncertain, but generally slow, and it is never attended by inflammation or heat. Fomentations would be thrown away here, and a puncture with the lancet would afford merely temporary relief. A seton must be passed through the tumour, from the top to the bottom of it, and worn until the cyst is obliterated. The contents of this tumour are also various; that which is oftenest seen is a glairy fluid, much resembling the white of an egg; but after the swelling has been opened two or three times, the fluid becomes mingled with blood, and at length purulent.

ENLARGEMENT OF THE THYROID GLANDS-BRONCHOCELE.

The throat of the dog exhibits yet another kind of tumour. On either side of the windpipe, sometimes high up in the neck, at others almost as low as the chest, will be felt an oval, movable, hard tumour, varying in size from a sparrow's to a pullet's egg. The pug, the Italian greyhound, and the Blenheim spaniel, are parti-

cularly subject to these tumours. In the pug they are often exceedingly large. The jugulars pass over them, and become strangely turgid from the necessary impediment to the circulation which such tumours must cause. The tumour sometimes presses upon the windpipe, and the dog breathes with difficulty, and has, in a few instances, been literally suffocated.

A seton passed through these tumours would produce immense irritation, and cause them to increase to a strange and fearful degree. Every external stimulating application has done harm, and the practitioner is left to the efficacy of medicine alone; but fortunately he has a medicine that will rarely fail in considerably diminishing the bulk of these tumours, and, in some cases, it will disperse them altogether.

RECIPE (No. 16).

Pills for Enlarged Glands.

TAKE-Iodine, twelve grains;

Powdered gum arabic, two scruples:

Rub them together with simple syrup, and form a hard mass. Divide into forty-eight pills, and give one or two, according to the size of the dog, morning and night.

Being very small, they can easily be concealed in bits of meat or bread and butter, and may, in the generality of cases, be given for a great length of time without any inconvenience, and especially if a dose of castoroil, or Epsom salts, is administered when the bowels are constipated; or once in every week or ten days, whatever may be the state of the bowels.

The approach of any inconvenience resulting from the use of the iodine will be indicated by the dog rapidly losing flesh; and in such case nothing more is necessary than to omit the pills for a week, and then give them again as before.

SCHIRROUS TUMOURS OF THE TEATS.

There are other tumours which cannot, perhaps, be any where more conveniently considered than here, viz., enlargement of the teats, or hard schirrous tumours in them or near them.

When the milk of a suckling bitch is dried away too rapidly, or when the teats fill with milk at the time at which she would have pupped had she been with the dog, and absurd external applications are made to disperse the milk, and especially if it is a maiden bitch, in whom this secretion often periodically appears nine weeks after she has been at heat, there will sometimes remain permanent enlargements around the base of the teats, or very small, hard, kernel-like substances will be found there.

The moment one of these little hard bodies is detected, it should be taken between the finger and thumb, an incision being made through the skin with a scalpel, and should be turned or dissected out; for if it is suffered to remain, it will assuredly grow to a very considerable size, and require a serious operation in order to its removal.

If the owner should object to this summary mode of proceeding, recourse must be had to the iodine pills, which should be given of the same strength, and with the same intervals, as for enlargement of the glands of the neck.

The iodine, however, has not so rapid nor so certain an effect as in enlargement of the glands of the neck, and it may be advisable to have recourse to another preparation of the same mineral.

RECIPE (No. 17).

Ointment for Schirrous Tumours.

TAKE—Hydriodate of potash, one drachm;

Lard, seven drachms:

Rub them together, and form an ointment.

A quantity varying from the size of a kidney-bean to that of a filbert, in proportion to the bulk of the tumour, should be rubbed into it, and around its base, morning and night.

The combined influence of the pills and the ointment will generally disperse these tumours in their early state: but if they have been permitted to grow, and to acquire considerable bulk, they will often bid defiance to any external application or internal medicine. An operation is then the only resource. The nature of this operation will vary with the size and attachment of the tumour. If it does not weigh above two or three ounces, and is quite detached from the belly, and can be in a manner drawn from it, so as to leave a kind of pedicle not larger than a finger, a ligature of double waxed silk may be passed around it, and tightened, and in the course of three or four days the tumour will drop off. If the swelling is of larger size, and is not so perfectly detached, it will be better and safer to remove it with the knife.

The sooner the owner can be prevailed upon to have one or the other of these operations performed, the better for the poor animal, for a radical cure may now be probably effected; but at some uncertain time afterwards the tumour will begin to enlarge more rapidly; it will become red and glistening, hot and tender; and the dog will evidently suffer considerable pain. From a florid red colour, it will afterwards change to a darker hue, and at length assume a purple tinge, and break. A very considerable discharge of thin, ichorous, bloody fluid will follow, and an ulcer of variable depth will be formed.

This ulcer, however, will heal without much difficulty; but it will redden and break again, possibly three or four times in less than double that number of months.

Irreparable mischief was done, however, at the first ulceration, for the ichorous fluid which flowed from the wound inoculated the neighbouring parts, and other little kernels, or nuclei, will soon be felt about the base of the original tumour. Absorption likewise of a portion of this fluid took place from the surface of the wound, and the virus was carried into the circulation, and empoisoned the whole system; and, therefore, not only around the original tumour, but connected with other teats, these kernels will begin to appear. It is now a purely constitutional disease, and local means are altogether unavailing. The removal of any one of the tumours would be useless, for the one next in size would speedily begin to grow, and become fully as large as the other, and the animal might be needlessly tortured with operation upon operation. The iodine also will now be comparatively powerless.

The treatment of these tumours when they are broken, or, at least, for the first four or five times that they ulcerate, is very simple. If the dog is tolerably tractable,

a poultice should be applied, and worn, being changed morning and night, until the fluid has run itself out, and the wound begins to look a little healthy. A few dressings with lint or tow, wetted with friar's balsam or tincture of aloes, will then heal the wound. If the discharge should continue more than three or four days, an astringent may be resorted to, for the long continuance of the poultice would debilitate the part, and indispose it afterwards to heal.

RECIPE (No. 18).

Astringent Lotion for Wounds.

TAKE—Bruised oak-bark, two ounces; Powdered catechu, an ounce:

Boil them in three pints of water until the fluid is reduced to a pint. Strain the decoction, and put it by for use.

The ulcer should be washed with this several times in the day. It is both astringent and healing; it will arrest the ichorous discharge, and hasten the process of granulation.

CANCEROUS ULCERS.

The time will come when the wound will no longer heal. It will have assumed a new character; it will have become a malignant cancerous ulcer, the source, no doubt, of great pain to the animal, wearing her down with greater or less rapidity, and rendering her a perfect nuisance to every one about her. As soon as the cancerous ulcer is established, the duty of the practi-

tioner will be a straightforward one, namely, to advise that a termination should be put to that suffering which he cannot relieve.

If, however, it is insisted upon that the case should continue to be treated, fomentations of poppy-heads may be used to assuage the anguish; a weak solution of the chloride of lime to get rid of the stench; and the tincture of iodine, diluted with eleven times the quantity of water, to attack, if possible, the cancerous principle.

CANCER IN THE VAGINA.

Cancer occasionally attacks the vagina of the bitch. It is the consequence of injury and ulceration of the membrane lining that passage; either from being suddenly forced from the dog; or from difficult parturition, and in which the practitioner has been compelled to have recourse to instruments; or the presence of, or awkward or ineffectual attempts to remove, a fungous substance which sometimes grows on the membrane of the vagina, and which will be described in its proper place. Cancer should not be confounded with these fungous excrescences, for their cauliflower appearance, their florid colour, the pedicle or stalk from which they spring, and the blood which is continually flowing from them, will sufficiently characterize them: whereas cancer is immediately distinguishable by its livid colour, its uneven surface, its hardened base, and its peculiar pungent and nauseous smell. When the vagina is felt externally, it is uniformly soft if it is occupied by this fungus, but it is peculiarly hard and unvielding when it is cancerous.

Even if it is attacked before there is any external ulceration, there is very little chance of doing good. The iodine pills may be given internally, and the diluted tincture of iodine, as before recommended, injected up the vagina. The tincture of iodine is thus composed:—

RECIPE (No. 19).

Tincture of Iodine.

TAKE—Iodine, a drachm; Rectified spirit, an ounce:

Shake them several times well together, and the iodine will speedily dissolve. Sufficient only for the use of a week or two should be made at once, because a portion of the iodine will after that time separate from the spirit, and become precipitated.

CANCER IN THE EAR.

Cancer is occasionally the consequence of inveterate canker. It appears first in the internal part of the ear, but it spreads to the cheek and down the face, corroding and destroying every thing before it. The progress of this species of cancer can seldom be arrested.

ADIPOSE TUMOURS ABOUT THE TEATS.

It is not every tumour of the teats that becomes schirrous or cancerous. Some of them seem to be composed of mere masses of fat that have been separated from the neighbouring substance. These are termed adipose tumours. They seldom grow to any very large size, and they never ulcerate. They are not often attached to the teats; they are more between them,

and they may be known by their uniform smoothness and softness.

ENCYSTED TUMOURS OF THE TEATS.

Other enlargements, belonging more to the teats, are called encysted tumours. They are composed of a cyst including a fluid of uncertain character. An enormous tumour may sometimes be of this nature composed of a single cyst. These tumours occasionally ulcerate, but the ulcer does not become of a malignant nature. They are always plainly distinguishable from the schirrous tumour by the greater evenness of their surface, and by their not possessing the peculiar unyielding character of the schirrous tumour.

Some have recommended the passing of a seton through tumours of this nature. Good is rarely effected by this, and a degree of irritation has occasionally been produced that has been fatal to the animal.

The compound encysted tumour is more common than the simple one. One cyst being formed, another unites itself to it, or seems to grow upon it, and another and another follows, until there is an accumulation of them that makes the whole bulk of an enormous size. This species of tumour never breaks, but, when it hangs down upon or rubs against the ground, it occasionally becomes ulcerated, and the ulceration assumes a malignant character by a repetition of the cause of irritation.

A seton will be of no service here, for it cannot be passed through all the cysts. Both the simple and the compound encysted tumour will be best removed by means of the knife.

WARTS.

Dogs are often subject to warts. They appear scattered on various parts of the skin, either of a simple form, or with spreading, fungous-like heads. If a strong solution of the nitrate of silver is applied to them with a camel-hair brush, they will usually gradually dwindle away without any soreness or pain.

Sometimes they appear on the lips, and, frequently bleeding from the motion of the lips or tongue, some of the blood is conveyed into the mouth, and the whole of the interior surface of the mouth becomes covered with them. This is a sad nuisance to the dog, for he can eat no solid food, and scarcely lap enough to keep himself alive. The nitrate of silver must be daily applied over the whole of them, and it will be most conveniently used in the solid form over the greater part, if not the whole, of the mouth. If a solution is resorted to, some care must be taken that the brush is not too wet, and that as little as possible of the fluid is swallowed.

When warts appear on the inside of the prepuce or vagina, the lunar caustic in its solid form will speedily remove them.

Now and then they appear on the eyelids, and if they grow on, or incline to, the inner edge, they are a source of insufferable annoyance, by entering into or pressing upon the eye. Many a severe inflammation of the eye has been produced by the constant irritation of a wart, and the disease has gone on to absolute blindness, because the owner or the practitioner has been too careless to

notice a diminutive wart that grew half concealed a little within the lid.

The method of removal will depend on the situation and the size of the wart. If it is small, and lies towards the inside of the lid, it may be cut off with a sharp pair of scissors, and the root lightly touched with the caustic, finely pointed. If it lies more on the outside it will be best got rid of by means of a ligature of very fine waxed silk, as the bleeding and propagation of the wart will be thus avoided.

CHAPTER XXX.

COUGH-ASTHMA.

THE dog is as subject to catarrh and cold as other animals: but there is a singular difference in the sound and character of the cough of dogs under different circumstances, and indicative of different affections of the lungs, the immediate recognition of which marks the man who is accustomed to their diseases.

There is a cough, the very sound of which indicates obstruction of the air-passages, or accumulation of mucus there. It comes on after the slightest exertion; it is, in a manner, incessant from morning to night; and it terminates with an apparent attempt to vomit; but nothing is ejected except a little frothy mucus, either white or discoloured with bile. The dog is usually middle-aged, if not old; in good, or perhaps too good a condition; and the cough does not seem to affect the health in the slightest degree.

Emetics will afford the most certain and the greatest relief (Recipe No. 14, p. 172). One may be given every third or fourth day, varying from a grain of the compound powder to a grain and a half, according to the size of the dog.

Should the asthma, for that is the proper name of this

kind of cough, not be relieved by the emetics, a coughball should be given morning and night on each of the intermediate days.

RECIPE (No. 20).

Cough Balls.

TAKE—Powdered digitalis, a scruple;
Antimonial powder, two scruples;
Nitre, six drachms;
Sulphur, two drachms;
Palm-oil, three drachms;

Divide into ten or twenty balls, according to the size of the dog.

There is another kind of cough, or rather huskiness, which is the companion of distemper. This is not so loud, and sooner terminates in the attempt to vomit.

A third kind of cough is a hollow and very noisy one; occurring frequently during the day, and most of all at night. The emetics and cough-balls will be useless here, unless they are preceded by a copious bleeding, and then they will rarely fail of having effect. Bleeding is seldom indicated in either of the other kinds of cough.

COLD AND COUGH.

A cough arises from an irritation of the lungs; and may be produced by a cold, or otherwise. It is generally the effect of a cold, and may be removed by

RECIPE (No. 21).

Antimonial powder, five grains; Calomel, four grains;

Made with honey into two boluses, and given in the evening for two nights successively.

If a dog should be afflicted with a cough, in the first

place examine his throat, in order to ascertain if any species of bone is lodged there; as such a circumstance will cause a dog to cough for weeks. If the cough arises from a cold, administer a dose or two of syrup of buckthorn. Should the cough still continue, give tartar emetic, as described under the head *Distemper*.

CHAPTER XXXI.

DISTEMPER.

This is the most fatal disease to which the dog is subject, and it is one which he seems doomed to undergo at least once in his life. An attack of it is indicated by a gradual loss of appetite, and spirits, and flesh, without any peculiar local affection; by mucus collecting at the corner of the eye, and by that husky cough to which allusion has been made in the last chapter, and which is rather an apparent attempt to get something from the throat than a true cough. Soon after this, the usual watery discharge from the nose will cease, and it will gradually thicken and stick about, or plug up the nostril, and at length become purulent or bloody. These are the general characteristics of distemper in every dog, except the greyhound, in which it is often characterized by emaciation alone.

The appetite is now generally lost, and one of three symptoms makes its appearance. Either the dog begins to purge, and the discharge rapidly increases, being first almost chalk-coloured, then olive-coloured, then mucus, and, last of all, consisting of mucus and blood mingled together: or fits come on, ushered in by a peculiar champing of the lower jaw, and which, if only a second

appears, bid defiance to all medical aid; or the eyes become inflamed; a film spreads over them; a small ulcer appears in the centre of the transparent cornea; it deepens and spreads; the contents of the forepart of the eye are evacuated; and the sight seems to be irrecoverably lost.

There is scarcely a sportsman or a whipper-in who has not a supposed infallible cure for distemper; but it must be sufficiently plain that the treatment of a disease so variable in its symptoms must be regulated by those symptoms. One thing, however, should be given, whatever be the symptoms, and as the precursor of every plan of treatment, and that is, an emetic. One or two grains of the emetic powder (Recipe No. 14, p. 172) should be sprinkled on the tongue, or dissolved in a little milk, or concealed in a bit of meat.

If the cough is violent, the breathing quickened, and the muzzle hot, the dog should lose blood. The average quantity that should be taken away has already been stated at page 138. Bleeding is serviceable in this stage of the disease alone; afterwards it would be almost certain destruction to the dog.

Next the cough-balls (Recipe No. 20, p. 187) should be given, from half a drachm to two drachms in weight, according to the size of the dog, and repeated morning, noon, and night; an emetic being repeated every third or fourth day, depending on the degree of huskiness.

In many cases little more will need to be done; but if, when the cough abates, the dog should have become thin and weak, or if he should gradually lose flesh, the cough continuing as violent as ever, some tonic should mingle with the other medicine.

RECIPE (No. 22).

Tonic Balls.

TAKE—Gentian-root, powdered, one pound;
Chamomile-flowers, ditto, half a pound;
Oak-bark, ditto, half a pound;
Ginger, ditto, four ounces;
Carbonate of iron, four ounces;
Palm-oil, one pound:

Beat them well together, and keep the mass in a closed jar for use.

Equal parts of the cough and tonic medicine will constitute the best ball for this stage of the disease, increasing the cough medicine if the affection of the chest should increase, and the tonic medicine if the strength and condition of the dog should be rapidly wasting.

When the discharge from the nose becomes purulent, and especially if it should be brown, or bloody, or fætid, the cough medicine must be altogether omitted, and the tonic balls alone given.

During every stage of the disease, attention should be paid to the feeding of the dog; he should be moderately fed even when the cough is at the worst, and should be coaxed to eat, and tempted with various kinds of food, when his strength declines.

A physic-ball (Recipe No. 1, p. 138) may be given with advantage at the commencement of the distemper, if the dog is costive, and also during the state of fever; but few things are more to be dreaded than the diarrhoa that often accompanies distemper, and which nothing will arrest. The distemper purging being once established, a physic-ball will probably be too irritating; yet some effort should be made to carry off any irritating matter in the bowels. The Epsom salts will be the

safest and the most effectual medicine here; and from one to four drachms may be given, according to the size of the dog, and either dissolved in a little water, or rolled up in tissue paper, in which form they will be less likely to occasion sickness.

The day after the administration of the salts, a course of astringent balls should be commenced.

RECIPE (No. 23).

Astringent Balls.

TAKE—Prepared chalk, two pounds;
Powdered gum arabic, half a pound;
Powdered catechu, half a pound;
Powdered oak-bark, half a pound;
Powdered ginger, four ounces;
Powdered opium, half an ounce;
Palm-oil, one pound;

Beat them well together, and keep the mass in a jar for use.

The size of the ball will depend on that of the dog, and vary from half a drachm to two drachms. It should be given morning, noon, and night; simple water being put out of the animal's reach, and water in which a little whole rice has been boiled being substituted. In cases of very obstinate purging, the following injection may be thrown up:—Good thick starch or gruel, a quarter or half a pint, according to the size of the dog, and from five to ten drops of laudanum.

The method of treating the inflammation of the eye which frequently accompanies distemper has been already described in p. 160.

Sufficient warning is usually given of the approach of distemper fits: there is not only the champing of the lower jaw, but an unwonted and insatiable appetite; the

mucus all at once disappears from the eyes; and there is usually a twitching of some part of the frame.

The medicine first to be administered is an emetic (Recipe No. 14, p. 172), and a strong one too, compared with the size of the dog. To this should follow sufficient castor-oil to open the bowels, and repeated doses of it afterwards, so as to obviate costiveness; and to this should succeed the tonic balls (Recipe No. 22, p. 191), with a quarter of a grain of opium in each. Now, also, is the time when a seton will, if ever, be serviceable. It should be inserted by means of a proper seton-needle (never the farrier's red-hot iron), and extend over the poll, and under the skin, from ear to ear. If there should be increased by moistening it occasionally with oil of turpentine, or liquid blister.

RECIPE (No. 24).

Strong Liquid Blister.

TAKE—Powdered Alkanet root, two ounces; Spirit of turpentine, a gallon.

Pour the turpentine on the alkanet root, and let it macerate three days, frequently shaking it; on the fourth day let it stand undisturbed; then put one pound of Spanish flies, powdered, into another jar, and pour on them the clear turpentine from the first jar. Let these macerate a month, daily shaking them; then let the jar stand undisturbed four days, and pour off the clear fluid for use.

(Preserving the proportions where a smaller or larger quantity is to be made.)

At the moment of the fit, do not let the poor animal be thrown into water, or a quantity of cold water sluiced over him; it will be quite sufficient to take him by the nape of the neck with the left hand, and dash a little cold water against his muzzle from a tea-cup with the right hand, and the fit will usually cease in an instant.

During the whole of the disease, the dog should be kindly treated. Few persons are aware how far this will go in preventing fits, or recovering the dog from them, and effecting a cure.

If fits should degenerate into chorea, or a spasmodic action of some limb, or if this spasmodic action should follow distemper, without the intervention of fits, it is not often that the dog will recover the full use of his limbs. A seton will here also be indispensable; costiveness must be prevented by occasional doses of castor-oil; the dog must be well fed, and a course of tonic medicine must be long persisted in. The tonic balls (Recipe No. 22, p. 191) may first be tried, and, should they fail, the following may be given, and usually with much success.

RECIPE (No. 25).

Tonic Pills for Chorea.

TAKE—Nitrate of silver (lunar caustic), eight grains;
Ginger, powdered, a scruple;
Simple syrup, a sufficient quantity;

Divide them into sixty-four pills, and give one or two, according to the size of the dog, morning and night.

If no amendment is produced in the course of three weeks, it will be useless to pursue the treatment. There will always, however, be one guide that will not deceive the practitioner:—if the dog is gaining flesh, although exceedingly slowly, he will ultimately get well; but if, after the appearance of chorea, he should continue regularly to lose flesh, however slow may be the progress of the emaciation, he will ultimately be lost.

The distemper frequently attacks a dog before he has attained his first year. As a preliminary observation, it may be remarked, that the same membrane which lines the nostrils, extends down the windpipe into the lungs; and the distemper, in the first instance, may be regarded as an inflammation of this membrane, which, if not timely removed, extends down to the lungs, where suppuration will soon be produced, when the animal's eye will become dull, accompanied by a mucous discharge, a cough, and loss of appetite. As the disease advances it presents various appearances; but is frequently attended with twitchings about the head, while the animal becomes excessively weak in the loins and hinder extremities. Indeed he appears completely emaciated, and smells intolerably. At length the twitchings assume the appearance of convulsive fits, accompanied with giddiness, which causes the dog to turn around. He has a constant disposition to dung, with excessive costiveness. or incessant purging.

On the first appearance of the symptoms which I have described, I should recommend that the dog be bled very freely, and that his body be opened with a little castor-oil or syrup of buckthorn. This will, generally, remove the disease altogether, if applied the moment the first symptoms appear. If, however, this treatment should not have the desired effect, and a cough ensues, accompanied with a discharge of the nose, give from two grains to eight of tartar emetic, (according to the age and size of the dog) every other day. When the nervous symptoms ensue, which I have already described, external stimulants (such as sal-ammoniac and oil, equal parts) should be rubbed along the course of the spinal marrow, and tonics given internally, such as bark, &c.

Of the various remedies the following was given, with success, to a dog so afflicted as to be scarcely able to stand; viz:

RECIPE (No. 26).

Turbeth's mineral, six grains;

Mixed with sulphur, and divided into three doses, one given every other morning.

Let a few days elapse, and then repeat the course.

Another:

RECIPE (No. 27).

Calomel, one grain and a half; Rhubarb, five grains; Given every other day for a week,

Another:

RECIPE (No. 28).

Antimonial powder, sixteen grains; Powdered Foxglove, one grain;

Made into four boluses with conserve of roses, and one given at night, and another the next morning, for two days.

I have uniformly found a complete cure effected from copious and repeated venesection, in the early stages of the distemper, accompanied with a little opening medicine,—syrup of buckthorn, for instance. In the kennel of Sir Harry Mainwaring the distemper generally swept away a third of the young dogs, at least. My system of treating the disease has since been adopted with the most beneficial effect.

CHAPTER XXXII.

FITS-LOCKED JAW-PALSY.

No animal is so subject to fits as the dog; and, next to distemper, they destroy a greater number of dogs than any other disease. A puppy cutting or changing his teeth is very subject to fits; and the remedy is to lance the gums and give a dose of physic. Worms will produce them; the vermin must be destroyed by the medicines that will be hereafter pointed out. Dogs that are too well fed, and have little regular exercise, will often suddenly fall into fits, if they are suffered to range at large and are more than usually excited. The remedy is regular exercise and occasional physic. At the beginning of the season many sporting dogs have fits; and when they once appear in a kennel almost every dog occasionally becomes affected by them.

For a dog that is subject to occasional fits there is no better medicine than the alterative balls (Recipe No. 3, p. 147). One should be given every morning, and a physic-ball occasionally. These balls will be particularly useful if the dog is become too fat and pursy. If fits are produced by the convulsive cough of spasmodic asthma, an emetic is indicated. In cases where the alterative balls fail, the tonic will sometimes succeed,

and the nitrate of silver pills, recommended under chorea, will very much diminish the tendency to epilepsy. If the fit is obstinate at any time, it will be proper to bleed; the full quantity of blood, according to the size of the dog, should be taken, and anodynes given. The syrup of white poppies is the best, for it is almost the only preparation of opium that will remain on the stomach of the dog, and it may be administered in doses of from one to two drachms once or twice every day. If the fits are connected with costiveness, the following mixture may be given; it is the very best aperient, for general purposes, that can be administered to the dog.

RECIPE (No. 29). Aperient Mixture.

TAKE—Castor-oil, one ounce and a half; Syrup of buckthorn, an ounce; Syrup of white poppies, half an ounce;

Mix them together, and keep the dog in a cool place. The dose will vary from a teaspoonful to a tablespoonful, according to the size of the dog.

Locked-jaw, or tetanus, is a very unfrequent disease in the dog, and I do not recollect a single case of recovery. The plan of treatment would be to bleed, and to give alternately, or at such times as to keep the bowels regularly open, the above aperient mixture and the syrup of white poppies.

Palsy is a frequent disease in the dog. It is too often the consequence of distemper, and then is seldom removed. The only hope of its removal depends on the good condition of the dog, and on his retaining that condition. It is the same as in chorea; if the animal is in tolerable plight and spirits, there is a chance; if he

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is gradually wasting and sinking, no medical skill can arrest the progress of the disease. A seton, the keeping of the bowels in a rather relaxed state, the feeding of the dog, and the exhibition of tonic medicines, will be the principal means indicated; and to these may be added local applications.

RECIPE (No. 30).

Embrocation for Palsy and Rheumatism.

TAKE—Spirit of turpentine;
Hartshorn; and
Camphorated spirit; one ounce each:
Laudanum, half an ounce.

A little of this should be well rubbed in along the course of the spine, morning and night, being omitted for a few days if the part should become blistered or very sore.

In a great many cases, and particularly when palsy is the consequence of either constipation or rheumatism, or both, these measures will fail of success, and recourse must be had to another stimulus. The hair must be cut off from the beginning of the loins to the tail, and extending half way down the thigh, on either side. A piece of thick white leather must be cut precisely to fit the part from which the hair has been clipped, and, the materials for a charge,* having been melted and spread

*RECIPE (No. 31).

A charge for the Loins or Legs.

Take—Pitch, three pounds;
Tar, one pound;
Bees-wax, half a pound:

Mix them together, and, when they are cool enough to be conveniently applied, spread the charge thickly over the loins, and scatter some flocks of short tow over it before it gets quite cold and firm.

on the leather, it must be applied over the loins while warm as accurately as possible. It will adhere closely to the skin, and almost without the possibility of getting it off, for three weeks or a month; and in that time its constant but mild stimulus will often recall the power of motion.

Rheumatism is also a frequent disease of the dog. is entailed upon him by his unnatural petted state. Its most frequent immediate cause is constipation, degenerating by degrees into inflammation of the bowels. He cries when he gets up, cries when he walks, cries when he is lifted up, and frequently if he is merely looked at. The remedy is in most cases very simple and perfectly effectual. He must first be put into a warm bath of the temperature of 96 degrees, and kept in it ten minutes or a quarter of an hour. As soon as he comes from the bath the aperient medicine must be administered in the dose of a dessert or tablespoonful, according to his size. and repeated in half doses morning and night until he is relieved. This will usually be all that is necessary; but if complete relief is not afforded, recourse may be had to the rheumatic embrocation (Recipe No. 30, p. 199). which should be well rubbed on the part that seems to be principally affected, and should follow the apparent shiftings of the disease from limb to limb.

CHAPTER XXXIII.

INFLAMMATION OF THE LUNGS.

The existence of this disease is easily recognised. There is not only the cessation of the cough, the heaving, the heat of the mouth, and the coldness of the feet, which characterize the same malady in the horse, but there is the same disinclination to lie down. The dog seats himself upon his haunches, his head elevated, his muzzle protruded, his breathing hard and quick, and his countenance anxious; yet there he sits, and will sit hour after hour, and until he is so completely wearied that his legs slip from under him; still he recovers himself, and will not fall until he falls to die. The causes which lead on to cold and inflammation of the chest in other animals will produce it in the dog; and he is often predisposed to it by the foolish nursing that is lavished upon him.

He must be bled, and to the full quantity, according to his size. To this should follow a dose of physic. The Epsom salts rolled in paper, or in solution, will be most likely to remain on his stomach and to produce the desired effect. Then should be given the cough and fever balls (Recipe No. 20, p. 187), made fully large when compared with his size, and repeated morning, noon, and night.

A second bleeding should take place if the inflammation is not subdued; yet some caution should be exercised here, for the dog suffers more, perhaps, than any other animal by an unnecessary loss of blood. All food should be removed, or only a little milk and water, or weak broth, allowed.

This inflammation is either originally, or it soon becomes, one of the pleura, and then effusion in the chest quickly follows. For this there is seldom any cure.

CHAPTER XXXIV.

POISONS-WORMS.

Few animals are so exposed to the vengeance of some miscreant, or so much in the way of accidental poisoning, as the dog. The poisons usually given, or picked up by chance, are arsenic, corrosive sublimate, and nux vomica, and there is seldom any remedy. The two first are attended by excruciating colicky pains, and a discharge of blood by stool. When this last symptom appears there is no hope.

The poison of lead may be combated. Dogs are fond of licking new paint, on account of the oil which it contains, and perhaps the sweetness of the lead. They often likewise lap water that has long stood in paint-pots that have been carelessly suffered to stand about. The symptoms are the crying and moaning of the animal, his anxious countenance, his peculiarly tucked up and corded belly, and an excessive degree of costiveness.

The bowels must be opened—particularly with calomel, in order that a chemical decomposition may take place. The lead that has been received into the stomach or intestines has a strong affinity for the chlorine with which the mercury is combined; and a salt of lead, the chloride or muriate, is formed, which is not or a poison-

ous character, while the mercury is left free, and also harmless, in the stomach or bowels. The opening of the bowels may be assisted in the first place by the aperient mixture, the anodyne in which will likewise sheathe the inflamed membrane of the bowels; but the chief dependence is to be placed on the calomel, which will combine with the lead, and render it innocuous.

The dog is seldom without worms; but except they exist in large quantities they do little harm. There are four varieties of worms in dogs.

The first is a small worm, two or three inches long, sharpened at both ends, and of a somewhat hard structure. This is usually found in the stomach of puppies. Occasionally they are vomited, either singly or rolled into masses. They have been found in the trachea, where they have produced a great deal of irritation and a most distressing cough, and they are very much concerned in the production of the fits of young dogs.

If one of these worms is accidentally discovered, an emetic should be given, and then a physic-ball (Recipe No. 1, p. 138).

The next kind of worm is the long round worm, resembling that in the horse. This seldom produces irritation or disease unless it exists in great numbers.

In order to expel this worm a physic-ball should be given on every fourth morning; and on each of the intermediate days, and an hour before the dog has any thing to eat, one of the following balls should be given, weighing from three-quarters of a drachm to two drachms, according to the size of the dog.

RECIPE (No. 32).

Worm Balls.

TAKE—Carbonate of iron, half an ounce;
Ethiop's mineral, one drachm;
Gentian, an ounce;
Ginger, half an ounce;
Levigated glass, an ounce;
Palm-oil, nine drachms:

Beat them well together, and keep them in a covered jar for use.

The third kind of worm is one of a singular kind. is composed of a multitude of joints, three or four hundred of them, and each joint capable of becoming a perfect worm. It is sometimes three or four feet in length, and probably occupies the greater part of the length of the intestinal canal. At the upper end is a narrow neck, terminating in a small head furnished with suckers or tentacula, by means of which the animal adheres firmly to the intestine. Even when the bowels are in a manner filled by the worm,—for sometimes two or three exist there at the same time,—it is singular how little inconvenience the dog suffers. The bowels will be so occupied by them that there does not seem to be comfortable room for the whole of these parasites, and joint after joint is detached, and crawls from the anus. about half an inch in length, and flat; and yet the dog is in perfect health.

It is very difficult to detach and expel this worm, and it is necessary that the whole of it should be detached; for if only the little neck and head remain the reptile will grow again, so as once more to fill the bowels. The worm-ball just recommended seems to be the only thing that has power to effect its destruction. The

rough filings of the tin irritate and wound the skin of the worm, and cause it by degrees to detach itself from its hold, and to be carried on by the peristaltic motion of the bowels, increased by the physic-ball, which is periodically given.

The last worm is the ascaris, or thread-worm, inhabiting the lower intestine. These are not, except they exist in large quantities, injurious to health, but they often tease the dog by the itching which they occasion about the anus. Medicine has comparatively little effect upon them, but the readiest way to expel them is to inject some linseed-oil and solution of aloes up the rectum.

For worms, generally speaking, the following may be regarded as a sovereign remedy; and there are few cases which it will not effectually cure.

RECIPE (No. 33).

Linseed-oil, half a pint;

Oil of turpentine, two drachms.

Repeat the dose, if necessary.

CHAPTER XXXV.

COLIC—INFLAMMATION OF THE BOWELS—DIARRHŒA— PROTRUSION OF THE RECTUM—PILES.

THERE is a species of spasmodic colic with which puppies are often attacked. The little animals are uneasy and fidgety, shifting their posture and place, hiding themselves in corners, looking at their sides, and crying as they run. It attacks them at all ages; but from one month to three they are most exposed to it. If it is neglected, it is usually fatal, and examination after death shows an intussusception, or receiving of one part of the small intestines within another. This causes an evident and insuperable objection to the passage of the fæces; at the same time it shows the fearful degree of painful spasm that must have taken place.

The cure for it, and an almost certain one, is the exhibition of the aperient mixture (Recipe No. 29, p. 198), in doses apportioned to the size of the dog, and given morning, noon, and night, until the bowels are well opened, a slightly aperient action being kept up by occasional doses afterwards. If the spasm does not soon yield to the mixture, a warm bath will often be serviceable, both in relieving the pain and preparing the bowels to act.

Inflammation of the bowels.—Inflammation of the muscular or peritoneal coat does not happen so frequently as the food and habits of the animal would lead one to suspect. One of the most frequent causes of it is costiveness. It is difficult to fix on the precise symptoms of this complaint. The dog is frequently bringing his stomach in contact with the floor, while his hind parts are elevated; he is feverish; the countenance is anxious; the belly tucked up, and hot and painful when touched; and the pulse, although small, is hard and wiry.

This disease requires bleeding, a warm bath, the aperient mixture, and low diet. The aperient mixture will be of far more service than any combination of aloes and calomel, or any other drastic purgative.

Of the varieties of diarrhæa that of distemper is the most to be dreaded, and too frequently bids defiance to all medicine. This has been treated of under distemper.

Next in obstinacy and serious consequences is bilious diarrhæa. The dog is even more subject to an increased secretion of bile than is the human being, and, on account of its stimulating and acrid character, inflammation of the mucous coat of the intestines is speedily produced. It is usually preceded and often accompanied by obstinate sickness. A great quantity of bile mingles with the fæces; the stools are in a manner composed of bile; they are evacuated with a great deal of pain; there is rapid prostration of strength; and the dog soon sinks under the disease.

The treatment of bilious inflammation and purging is often difficult. The aperient mixture (Recipe No. 29, p. 198) is first indicated, unless the purging is very profuse and blood mingles with the fæces, in which case the syrup of buckthorn must be omitted. As soon as the purging is a little restrained, that which will act on the cause of the disturbance of the bowels must be given.

RECIPE (No. 34).

Powder for Bilious Inflammation.

TAKE—Calomel, eight grains;
Antimonial powder, four grains;
Powdered opium, one grain:
Mix together, and divide into powders.

Give one or two of these, according to the size of the dog, morning, noon, and night.

One of the most distressing circumstances attending this disease is an incessant vomiting. A little boiled milk, with one drop of laudanum in it, will sometimes quiet the stomach; but if that fails, it is not often that any thing else will succeed. The following ball may, however, be tried:—

RECIPE (No. 35).

Ball for Incessant Vomiting.

TARE—Powdered chalk, one ounce;
Powdered colombo-root, half an ounce:

Make into a mass with thick syrup of poppies, and give from half a drachm to a drachm, according to the size of the dog, two or three times in the day.

Petted dogs are very subject to piles, produced by the stimulating nature of their food, and the costiveness to which they are subject. The dog frequently licks his anus, or drags it along the carpet; there is considerable swelling and tenderness of the part; a little matter often oozes out when it is pressed upon, and blood follows, not mingles with, the stools.

Present costiveness must be removed by the castor-oil mixture; a little sweet oil or pomatum should be smeared

over the part, or introduced up the anus with the tip of the little finger, and an alterative ball (Recipe No. 3, p. 147) given every morning.

A considerable tumour sometimes arises by the side of the anus, and is to be attributed to the same causes. It is exceedingly painful—swells to a very considerable size—is at first of an intense red colour, but becomes dark and purple, and, at length, breaks, and discharges a great quantity of thick bloody pus, leaving a large and deep ulcer. The tumour is a species of carbuncle. The ulcer will readily heal, if the bowels are kept open by means of the aperient mixture (Recipe No. 29, p. 198), and the astringent lotion (Recipe No. 18, p. 180) applied to the wound.

Very great attention should afterwards be paid to the feeding of the dog, and the proper state of the bowels. The alterative balls (Recipe No. 3, p. 147) will be useful, and an occasional meal of boiled bullock's liver should be allowed; otherwise the tumour will return, and, at length, degenerate into an ulcer of a cancerous nature, which will spread and corrode and destroy the dog.

To this chapter belongs an accident which occasionally happens to young dogs that are delicate and subject to frequent purging, viz. protrusion of the rectum. The part should be cleaned with warm water, and then returned as gently as possible. The purging should be stopped by means of the aperient mixture, without the syrup of buckthorn; if there is much tenesmus, a little of the same mixture, mixed with gruel, should be administered as an injection; the anus should be afterwards frequently bathed with cold water, and proper means taken to strengthen the constitution of the dog.

CHAPTER XXXVI.

DISEASES OF THE GENERATIVE ORGANS.

THE glans of the penis of the dog, and especially of the young dog, sometimes enlarges, and the prepuce contracts beneath it, and can no longer be brought over and made to cover it. The glans becomes of a pale red colour, glossy, and is evidently distended by a fluid. It must be punctured with a fine lancet, and the enlargement will speedly subside. It should then be examined whether any of the hairs at the edge of the prepuce had insinuated themselves into the sheath, and these must be cut off with a pair of scissors.

There is sometimes a discharge, or oozing of blood from the prepuce. This rarely or never proceeds from the urethra; but when the sheath is turned down, a cauliflower-like fungous growth is perceived, from which the blood flows on the slightest touch. If there is no great quantity of it, and the whole can be easily got at, there is a very fair prospect of a cure. It must be cut off closely with a pair of sharp scissors, and the roots touched with the lunar caustic. A second, or even a third, repetition of the paring of the fungus, and the application of the caustic, will not unfrequently be necessary.

If, however, the sheath seems to be in a manner filled with it, and the whole of it cannot be fairly exposed, humanity will require that the poor animal should be destroyed.

Castration is best performed in the dog by means of a ligature. An incision is made into the scrotum, the testicle turned out, and a tight ligature passed round the cord; after which the testicle is immediately removed.

The scrotum itself is subject to disease: there is enlargement of the bag generally, a very great redness of the integument, and the appearance of a superficial pimpled sore. Fomentation with warm water, and the application of the healing ointment (Recipe No. 5, p. 149), will usually effect a cure.

If this is neglected, that which, in the first place, was only inflammation of the integument, will spread to the testicle, and schirrous enlargement and cancer of it will be produced. Little hope of doing good can then be entertained, although in a few instances the friar's balsam and the healing ointment have effected a cure. The iodine pills (Recipe No. 16, p. 176) will be worth trying, if the owner is determined that a cure shall be attempted. In most cases, however, the patient should be put out of his misery as speedily as possible.

Castration will not always succeed in schirrous enlargement and cancer of the testicle: the disease will spread up the cord, when that has begun to enlarge; and, in some cases, when there is no apparent hardening or thickening of the cord, the cancerous tendency will remain.

The fungous excrescences already described are sometimes found in the vagina of the bitch, and generally produced either by difficult parturition, or the forcible separation of the dog from her at the time of heat. If these growths can be got at, a cure may be attempted; but if they are beyond the reach of the scissors or the caustic, no good can be done. These fungous growths, either from ineffectual attempts to get rid of them, or in their natural progress, terminate in cancer of the vagina; and injuries either at parturition, or the period of æstrum, are sometimes productive of the same consequence. It will be useless to attempt to cure cancer in the vagina.

CHAPTER XXXVII.

PARTURITION.

The bitch goes with young nine weeks. She rarely varies even one day. It is seldom before the fifth week that the belly begins to enlarge, or that the motions of the fœtus can be detected. A day or two before the expiration of her time of utero-gestation, she usually gets fidgety and uneasy, and selects her bed; and for some days before that the secretion of milk has commenced. If she has not been petted, and disposed to inflammation, and if the dog was not much larger than herself, there is little or no danger attending the act of parturition.

Petted bitches, however, frequently experience much difficulty in bringing forth their young, and manual assistance is then necessary. The precise time at which the connexion took place should be ascertained, and no attempt made to extract the fœtus, until some hours after the full expiration of the usual period of uterogestation, nor for the first six or eight hours after the labour has commenced should the bitch be worried by any attempts at examination or assistance.

When, however, it is deemed expedient to interfere,

the first thing that should be done is to examine whether any part of the fœtus has entered the pelvis; if it has not, she must be left undisturbed for a few hours longer. If it appears, after a second examination, that no progress has been made, a stimulant should be given; and the best stimulus to the womb, and that which has saved the lives of hundreds of these animals, is the Secale cornutum, or ergot of rye.

RECIPE (No. 36).

Ergot of Rye Pills.

TAKE—Ergot of rye, a scruple; rub it down to a fine powder, and then add,
Powdered ginger, sixteen grains;
Simple syrup, a sufficient quantity:
Beat into a mass, and divide into five pills.

One of these should be given to a bitch of tolerable size every hour, and half a pill to a smaller animal. They will usually rouse the womb to more forcible contraction, and often recall the labour-pains after they had ceased.

As soon as the fœtus is in the pelvic cavity, and a little portion of it presents from the external orifice, the finger, previously oiled, should be introduced into the vagina, by the side of the puppy, most especial cure being taken that the young one is not forced back. The position of the fœtus will now be ascertained. If it is a natural presentation, the muzzle being foremost, the fœtus may be a little advanced, by gentle solicitation and working of the finger. The finger must then be carried as far up as possible, and one of the shoulders of the dog felt for, and the elbow being found, that fore-

leg may be easily brought down. The other must be disposed of in the same manner, and then, by gentle but firm pulling, the whole fœtus will be extracted. It will never be prudent to use any force until the fore-legs are thus disposed of, for there will be hazard of breaking the puppy; and, that being done, the life of the mother is irrecoverably lost.

If the hinder legs present, there will be somewhat more difficulty. The puppy must be partly drawn, but more solicited, forward by the action of the fore-finger, in the manner I have described, until the chest is in the passage. The fœtus then being firmly held, a finger must be introduced, and the shoulder, and the elbow, on one side, sought for as recommended before, and that fore-foot brought forward. The other must be managed in the same way, and then the head will give little trouble.

Instruments should never be resorted to until the strength of the bitch is evidently exhausted, and the throes have ceased, and she can no longer assist the surgeon; then a hook resembling a button-hook, but with the extremity not curved round, must be taken, and, the fore-finger of the left hand having been introduced into the vagina, the hook is slid along it, completely guarded by it, and introduced into the mouth of the fœtus, in a case of natural presentation, and into the pelvic cavity if the presentation is not natural; and being gently, but somewhat firmly, pulled, while the fore-finger of the left hand is still urging the fœtus forward, it may often be extracted.

Soothing and gentle treatment will avail more here than any force that could be used.

Inversion of the womb sometimes takes place, when

too great force has been used. If it is immediately and carefully returned, there will be little danger; but if considerable straining should continue after the womb is returned, a bandage must be contrived to press upon the external orifice, or a stitch must be passed through the lips of the vulva.

After the bitch has pupped, she should be left as much as possible to herself; for she will then be far more likely to do well than when disturbed by the kindest nursing. She may be suffered to eat and drink as usual, for it is rare that, even in petted bitches, any fever ensues, except from two causes.

If her young ones, or all except one, are cruelly taken from her, because there may perchance be a stain in their pedigree, nature will continue to secrete milk enough for the whole litter, and this will accumulate in her teats, and cause local swelling and inflammation: it will likewise be a frequent source of general fever, that cannot easily be subdued.

Physic, the cough-balls (Recipe No. 20, p. 187), little food, and frequent fomentations with warm water, wi be most likely to afford relief.

Sometimes, however, a contrary course is pursued. The owner sets great value on the breed, and is anxious to save every puppy; and, instead of finding out a fostermother for some of them, he suffers the whole litter to suck and exhaust her. A bitch that is used to hardship, and whose constitution has not been impaired by foolish fondness, will not be hurt by this; but a spoiled and petted bitch is rarely capable of suckling with safety more than half of her produce.

If too many remain with her, she, after a while, becomes somewhat stupid, and inattentive to her young

ones; she rapidly loses flesh; she will not eat; and she has a wild yet sunken look: then all at once she will lay herself down, and begin to pant dreadfully, as if she was about to die in a few minutes; or strong yelping fits come upon her.

This is the consequence of extreme irritability, produced by exhaustion and debility; and every thing that would tend to weaken the bitch would increase that irritability, and aggravate every symptom. It would, therefore, be bad practice to bleed her. The best allayer of irritability is a warm bath, into which she should be put, and kept ten minutes or a quarter of an hour; and if, after that, a physic-ball is given her, and half her puppies taken from her, she will do very well.

Sometimes a bilious diarrhœa will come on from the same cause. The same means must be pursued, with this difference, that a dose of the aperient mixture (Recipe No. 29, p. 198), must be given instead of the aloetic ball, and followed by the astringent balls (Recipe No. 23, p. 192).

CHAPTER XXXVIII.

DISEASES OF THE SKIN.

THERE is scarcely a keeper, or a whipper-in, who has not an infallible specific for the mange; and one or two applications are to perform a complete cure. I know nothing of these wonderful ointments, or lotions; and if I did I would not use them, because I should be sure that so sudden a revulsion from the skin would be very likely to produce other and worse diseases.

If the mange, whether red mange, or that of the common scabby kind, is derived from either of the parents, no power on earth will cure it; nor can the periodical mange, which has returned in the spring and he autumn for a few years, be ever eradicated from the blood. Mange caught on ship-board, and where the dog has had much salted meat, is very obstinate. The red mange, also, is difficult to cure; but patience and perseverance may conquer that.

Itching, although it may exist to a considerable degree, and even with some redness of the skin, will sometimes yield to medicine, and bleeding, and a little starvation. A physic-ball (Recipe No. 1, p. 138) should be given every fourth day, and an alterative ball (Recipe

No. 3, p. 147) on each of the intermediate days, and blood should be abstracted, according to the size of the dog.

If, however, a week should pass, and the itchiness and redness continue, the mange ointment (Recipe No. 2, p. 146) must be resorted to. The hair must be carefully parted, and a little of it gently but well rubbed into the skin, wherever the disease appears. This should be continued daily for a week, the physic and alterative balls being given as before. At the expiration of a week the dog may be washed, in order to ascertain the progress of the cure, and to open the pores of the skin, for the better effect of the ointment. The proof of cure will be the cleansing away of all the scabs, the wholesome and natural appearance of the skin, and the cessation of the itching. The medicine should be continued at least a week after the mange has seemed to disappear.

In red mange there is seldom any scabbiness, but intense redness, and heat, and itchiness of the skin on various parts, and particularly on the belly, the flanks, and the inside of the thighs. Here also the physic and the application of the ointment should be preceded by bleeding. The same medicine must be given, and one-eighth part of mercurial ointment added to the common mange ointment. Care must be taken that the dog does not lick it off, for if he does he will soon become salivated; and in order to prevent this, if he will not otherwise let it alone, a little powdered aloes should be mixed with the ointment.

Should little or no progress be made after a month's trial has been given to this treatment, the following lotion may be used.

RECIPE (No. 37).

Wash for Red Mange.

TAKE—Corrosive sublimate, a scruple; dissolve it in
Spirits of wine, two drachms; add
Milk of sulphur, an ounce; and gradually pour upon this,
well stirring the whole together,
Lime-water, half a pint.

This may be applied to, or rubbed on, the affected part by means of a bit of sponge or clean rag, the liquid being kept well stirred. There is little or no danger of salivation from the use of this liniment, unless it is used in great quantities or continued very long.

If the disease should still be obstinate, local applications may be altogether omitted, and the following alterative powder given daily.

RECIPE (No. 38).

Alterative Medicine for Red Mange.

TAKE—Ethiop's mineral, from two te five grains, according to the size of the dog;

Cream of Tartar, from four to ten grains; and Tartrate of iron, from one to three grains: Rub them well together.

I have known some sportsmen continue to give this for five or six weeks, and at length succeed; but even this will sometimes fail. Should purging, or a slight soreness of the mouth, occur at any period, the medicine should be discontinued for a week, and then given again as before.

I have said nothing of tobacco water, hellebore, or the tan-pit; they are "kill or cure" things, and better let alone.

A very peculiar species of mange will sometimes appear. A dog is perfectly well to-day, and his skin every where whole and sound; to-morrow a bare raw patch is found upon him, usually about his haunches, varying from the size of a shilling to that of the palm of the hand. It is exceedingly sore; it seems from the dog's manner to itch dreadfully; a thin, ichorous fluid exudes from it, and it spreads rapidly. Practitioners call it, from its sudden appearance and inflammatory character, "the acute mange."

It has a frightful appearance, but it readily yields to treatment. The dog should be bled, a dose of physic given, and the healing ointment (Recipe No. 5, p. 149) gently smeared over the sore; and very frequently, in three or four days, the whole will disappear.

Mange will frequently attack the feet of dogs. It usually appears, at least in its early stage, in the form of inflammation of the web between the toes, which becomes intensely red; an ichorous fluid exudes from it; and the dog is very lame. The wash for red mange will be the best application, but the foot should be bound up. The arm of a lady's worn-out glove will be most conveniently used for this purpose.

Sore feet, partly arising from this affection, but more from working over rough or stubble ground, is best cured by a strong solution of common salt, to which a little tincture of myrrh has been added.

When either sore feet or mange in the feet is neglected, the disease spreads to the toes, and particularly to the roots of the nails, and the nail is sometimes lost, and the dog for a while rendered useless. All broken nails should be cut, and all that are loosened should be pulled out; poultices of linseed-meal should then be applied to

abate inflammation; and after that the feet should be frequently bathed with the astringent lotion for wounds (Recipe No. 18, p, 180), diluted with an equal quantity of water, and a little tincture of aloes being mixed with it.

There are few disorders says Beckford to which dogs are so subject as mange. Air and exercise, wholesome food and cleanliness, are the best preservatives against it. Your feeder should be particularly attentive to it, and when any spot of it is perceived, let him rub it with the following mixture.

RECIPE (No. 39).

TAKE—A pint of train oil;

Half pint oil of turpentine;

A quarter of a pound of ginger in powder;

Half an ounce of gunpowder, finely powdered.

Mixed up cold.

If the disorder should not yield to the remedy just prescribed, three mild purging balls, one every other day, should be given, and the dog laid up for a little while afterwards. For the *red* mange, you may use the following:

RECIPE (No. 40).

TAKE—Four ounces of quicksilver;
Two ounces of Venice turpentine;
One pound of hog's lard.

The quicksilver and turpentine are to be rubbed together till the globules disappear. When you apply it, you must rub one ounce once a day on the part affected, for three days successively. This to be used when the hair comes off, or any redness appears.

To cure sore feet.—Wash them with brine, or salt and vinegar, a handful of salt to a pint of vinegar.

CHAPTER XXXIX.

SPRAINS.

Sprains are painful swellings of the ligaments and tendons of the joints; and are caused by too great extensions of the limbs, of which the tendons become relaxed. They should be well rubbed with the following, twice a day.

RECIPE (No. 41).

TAKE—Camphor, two drachms; Brandy, one ounce.

When the camphor is well dissolved, add one ounce of sweet oil, and shake them well together.

Should this not have the desired effect, try the following, viz.:

RECIPE (No. 42).

TAKE—Spirit of hartshorn, two drachms; Sweet oil, six drachms.

Well shaken, and applied as the others. Give a spoonful or two of syrup of buckthorn.

As sprains are attended with inflammation, this should be got rid of, in the first place, by fomenting with warm water four or five times a day, and the following lotion applied.

RECIPE (No. 43).

TAKE—Extract of lead, two ounces; Water, one pint.

Should any stiffness remain, after the inflammation has totally subsided, apply a blister.

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