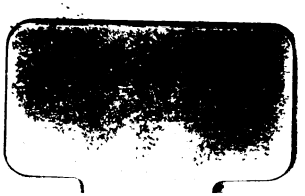
HOUSE DOGS
AND
SPORTING DOGS.



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PREFACE.

My object in writing this little work has been to supply the general reader with as much practical information upon the subject of the Dog, as was compatible with the very limited space at my command. With this view, I have omitted all mention of the Natural History of the Dog, especially with reference to speculations upon his origin; a question which has been exhausted, and with no very important results, in the writings of Cuvier, Linnæus, Bell and other eminent naturalists.

I have also excluded any but the briefest notices of such breeds of dogs as are unknown or uncommon in this country. Very few readers, I imagine, can take more than a cursory interest in the habits of such animals as the Australian Dingo, or the Indian Dhole. The space which I have

thus gained, I have devoted to fuller accounts of the commoner species. I have been particularly careful in giving a full description of the points, or characteristic excellencies to be looked for in each variety of Dog I have mentioned. The reader may, I venture to say, rely upon the accuracy of my information in this respect.

A considerable portion of the work is devoted to directions for breaking and training every breed of Dog used in shooting or hunting. Another part is taken up with rules for the general management of all Dogs, including those kept for amusement in the house, and those kept for use in the kennel. In another section I have given full instructions for the guidance of the breeder, with remarks on the rearing of puppies, &c. By far the greater portion of the work, however, is occupied with a description of the different diseases, surgical and otherwise, to which the Dog is liable, and the proper treatment to be observed in each case. In treating this part of my subject, I have endeavoured to do so in as practical and intelligible a manner as was possible; and, as I have written for the public generally, and not for the professional portion of it, I have in every case avoided unnecessary technicality.

There is one serious omission in my work—I have excluded all anecdotes about dogs for the authenticity of which I could not personally vouch. In doing so, I am a solitary exception to previous writers on the subject; but my book will, I believe, not suffer much in interest from this exclusion of second-hand anecdotes, and I have gained by it considerable space for more useful matter.

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THE DOG.

INTRODUCTION.

THE ORIGIN OF THE DOG—THE CLASSIFICATION OF VARIETIES.

THERE exist in different parts of the world several varieties of wild dogs, all of which possess an anatomical structure similar in every respect to that of the reclaimed races. To one, or perhaps more than one, of these stocks it is not difficult to trace the origin of our numerous domesticated breeds,—far more easy indeed than to ascribe it to animals which differ so widely from the dog in habits, character, and internal structure, as the wolf or jackal, and with either of which there is no authenticated instance of the dog having bred, and produced a fertile offspring.

The various wild breeds are all distinguished by a pointed muzzle, prick ears, a bushy tail, and a lean wolf-like body, and this characteristic form is retained by the dog when only partly domesticated,

or when, being domesticated, no artificial selection of particular animals to breed from is exercised by man. The Dingo, who either runs perfectly wild in the bush of Australia, or, if half reclaimed, receives no care from his masters, the rudest savages in the world, possesses the wild type in its most marked form, while the dog is everywhere observed to approach it in exact proportion to the care bestowed upon breeding him. The hardy sheep dog of the Highlands, who is allowed to rear his progeny with but very scanty attention, is only one degree removed from the original type, and possesses the prick ears, sharp muzzle, wolf-like form and bushy tail which I have described above. Where, on the contrary, great care is taken to modify the race, the dog, like most other domesticated animals, begins to *sport*, or change in form and colour; and if animals are selected to breed from which show most disposition to do so, the original form is gradually lost and merged into something which retains only a generic resemblance to the original stock.

In this way there is no great difficulty in tracing both the diminutive Toy Terrier, weighing less than two pounds, and the giant Mastiff of St. Bernard, which has been known to reach the weight of one hundred and fifty, to the same parent stock.

Cuvier's classification of the varieties of the dog is arbitrary, and even fanciful, but it is at least as convenient as any other, and I have accordingly partly adopted it. He makes three principal divi-

sions, namely, the Lurchers, the Spaniels, and the House-dogs. With the Lurchers he classes the wild or half-reclaimed dogs, the Dingo, Pariah, &c., and dogs which hunt chiefly by the eye, as the Deerhound, Greyhound, and Wolf-dog: with the Spaniels he classes Shepherds' dogs, Spaniels, Hounds, Pointers, and Sporting dogs in general: in the class of House-dogs he includes the Bull-dog, the Mastiff, and the Pug.

CHAPTER I.

GREYHOUNDS.

A BREED of dogs has been cultivated by nearly every European nation from time immemorial, for the purpose of capturing, by means of speed alone, the deer, the fox, the wolf, and especially the hare. As an animal possessed of such speed would present most of the points of the modern Greyhound, it is quite unnecessary to enter into the question of whether this dog is lineally descended from the ancient hound described by Arrian, and whether the prefix *grey* means Greek, or only the colour which usually distinguishes him.

THE SMOOTH GREYHOUND.

The smooth Greyhound is the variety upon the breeding of which most pains have been bestowed, and this dog is consequently the most perfect animal of his kind. Until the alteration of our game-laws in 1831, when great difficulties and restrictions lying in the way of persons who kept Greyhounds were removed, many distinct strains were jealously preserved in the kennels of the privileged few, who alone possessed Greyhounds. Before this date, the Newmarket, the Wiltshire, the Lancashire, the Yorkshire, and other strains were

well known and recognized breeds; but since the abolition of these restrictions, the number of dogs has increased to a remarkable degree; and it has been computed by an excellent authority on this subject, that at least twenty thousand Greyhounds exist in this country.

The points of the Greyhound are important; those to which good judges always look are the following:—

In the *head*, a good breadth across, and rather behind than in front of the ears: a thin, lean and powerful jaw; strong, white, and large teeth are particularly sought after — I never remember having seen a really staunch, useful Greyhound without this point. The eye should be bright and healthy-looking, but not too full. The shape of the ears is unimportant; good dogs may be seen with pendent or prick ears, but a falling ear is generally preferred.

The *neck* should be spare and muscular.

The desirable points in the *shoulder* and *fore-quarter* are difficult to describe, but very important; a person who knows what a good shoulder is in the horse, can tell what is required in the dog. The same obliquity in the shoulder-bone, which should be well covered with muscles, is wanted in both animals.

The *upper arm*, which joins the lower part of the shoulder, should be long, so as to throw the fore point of the shoulder well up.

The *elbow* should never touch the ribs, as this impedes the action in running; nor should it be turned out, which is generally the characteristic of a slow dog.

The *fore-arm*, which lies between the elbow and the knee, should be long and muscular.

The *knee* in a line with the leg, and bony; from the knee downwards, the leg should be short.

The *foot* should be round; the toes not spreading, the knuckles high and rather bony, and the sole, called the "pad," thick and hard, so as to stand work on rough ground.

The *chest* should be capacious; but this point should be attained by depth rather than width, which would interfere with the action of the shoulders.

In the *hind-quarters*, as in the horse, the hock should be well let down, the leg should be short, and the bones of the stifle joint and the hocks can scarcely be too large and strong. The muscles should be full, well-marked, and firm to the touch.

In the *back*, greater length is desirable when the Greyhound is intended to work in a level country. A long back gives a slower but longer stride; but a short, quick stride is obtained by a shorter back, and this is more desirable in a rough or mountainous country.

Directions for entering and training the Greyhound will be found elsewhere.

The Highland Deerhound.

This breed is gradually dying out, although he is a dog admirably adapted, from his speed, strength, and courage, for the purpose for which he is used, namely, coursing the red Deer; he is also used, in Deer-stalking, to run into wounded Deer; but for this purpose a substitute has been found in a cross between the rough Scotch Greyhound and either the Colley or the Foxhound. This cross, says Mr. Scrope, the author of 'Deer Stalking,' speaking of the cross with the Foxhound, answers the purpose well, as the speed of the Greyhound is combined with the nose of the Foxhound. "In point of shape," he says, "these dogs resemble the Greyhound, but they are larger in the bone and shorter in the leg. Some of them, when in slow action, carry the tail over the back like the pure Foxhound; their dash in making a cast is most beautiful, and they stand all sorts of rough weather."

Notwithstanding Mr. Scrope's encomiums upon this cross, I do not hear that it is much employed in deer-stalking, whereas the cross between the Deerhound and Colley is in many forests of the north preferred to any other breed.

The Queen possesses, or lately possessed, a Deerhound which was said to be thoroughbred. This animal, which I have seen, was nearly 31 inches in height, and measured 36 round the chest; his colour was a dark grey, running into a dusky fawn, with a black muzzle, and slightly pendulous

ears; his coat harsh and shaggy, especially on the jaws and neck. I am not aware of any other really pure-bred Deerhound in this country; if such animals exist they are very rare, and any claims to purity of breed should always be looked upon with suspicion. There are many dogs called Deerhounds by their owners, but these are invariably either the Scotch Greyhound, possessing some of the blood of the true Deerhound, or a cross of this breed with the Bloodhound or some other race. Maida, the celebrated Deerhound of Sir Walter Scott, a dog of extraordinary beauty and strength, of the so-called pure Glengarry breed, was bred by the chief of the McDonnels, who used to preserve this breed with much care, and, to avoid degeneracy from too much "in-breeding," was in the habit of using crosses of the Cuban Bloodhound and the large shepherds' dogs of the Pyrenees; and Maida was a half-bred dog,—his father being one of these Pyrenean sheep dogs.

The Scotch Greyhound.

This dog much resembles the Deerhound in colour and shape, but is generally below 26 inches in height, while the height of the Deerhound should be 28 and upwards.

I may observe in this place, that when the height of a breed of dogs is mentioned, it is always measured at the shoulder, and to be understood of

the dog alone; the bitch generally stands several inches lower. In some breeds this disproportion is greater than in others; as, for instance, in Rough Greyhounds and Deerhounds, the difference is from 4 to 5 inches, the dog being 26 inches, and the bitch 21 or 22; but in Foxhounds and Staghounds the difference is rarely so much as 2 inches. In a kennel of Staghounds, where the standard for dogs is 26 inches, the height of the bitches is over 24 inches, while in some breeds of terriers no difference in height between the sexes is perceptible.

The rough Scotch Greyhound is often passed off for and sold as the Highland Deerhound; but, besides the difference in height mentioned above, the Greyhound is less strongly made, even in proportion to his size.

The rough greyhound is now seldom or never used in public coursing; but great benefit has been derived from crossing the smooth English breed with the rough dogs, and thus obtaining greater strength and hardiness, without any sacrifice of speed. The most signal instance of the success of this cross was the celebrated dog "Gilbertfield," (pupped in 1831), who was the fastest Greyhound of his day, and was by a smooth sire out of a rough dam. But this cross is now seldom adopted, as it is supposed that the smooth variety has already derived all the benefit it can receive from a cross with the rough greyhound. It has been alleged, with some truth as far as my experience goes, that

the rough greyhounds are apt to run cunning. In speed they are somewhat inferior to the smooth breeds, and in stoutness very much their inferiors.

The points of the rough and smooth Greyhounds are identical.

The Welsh rough Greyhound

Does not differ in shape or colour from the Scotch breed, of which he seems to be only a variety.

The Irish Wolf-dog.

This animal is entirely extinct. I only mention the breed to prove what astonishing results careful selection in breeding can produce. There is even some doubt as to what variety this famous dog belonged to, but it is certain that to have caught and coped with the wolf, he must have been of the greyhound form. Indeed, both Ray and Pennant have described him as a tall, rough greyhound of extraordinary size and power. Ray says it was the "greatest dog he had ever seen." Evelyn, when describing the sports of the bear-garden, says, "The Bull-dogs did exceedingly well, but the Irish Wolf dog exceeded all, which was a tall Greyhound, a stately creature, and did beat a cruel Mastiff." Oliver Goldsmith, no very reliable authority perhaps, says, in his loose way, that he once saw about a dozen of these dogs, and that one was about four

feet high, or as big as a yearling heifer. Another account represents them as sufficiently tall to put their heads over the shoulder of a person sitting down.

But the most singular, and perhaps the most reliable proof of the gigantic size of this extinct breed, is a skull, evidently, from its shape, that of a greyhound, discovered by Mr. Wylam at Dunshauglin. This skull, now preserved in the Royal Irish Academy, measures 11 inches in length. As the skull of a common greyhound is not more than 7 inches long, the ancient dog, if his height was in proportion to the size of his skull, would have been upwards of 40 inches in height at the shoulder, a size exceeding by one-fourth part that of the tallest Deerhound, and quite justifying the descriptions of Ray and Pennant.

The Italian Greyhound.

This little Greyhound is a great favourite from his beauty, grace and liveliness; but he is bred a great deal too slight by the fanciers in this country, to be of any use in the field, although I have seen a pure-bred bitch of this kind, imported from Italy by a relative of mine, which would run down rabbits, and was so plucky as to be nearly a match for a Dandie Dinmont Terrier of about her own weight, with which she often had the most sanguinary battles.

Shew as of a light blue-fawn colour—a colour not held in the very highest estimation by English dog fanciers; but in shape she was allowed to be perfect. She weighed nearly 12lbs.

The Italian Greyhound should resemble the smooth Greyhound in every point, except that the *head* should be rather fuller, and the eyes more prominent. So much stress is not laid upon the strength and muscularity of the frame as in the Greyhound.

The *legs* should be particularly fine, and the feet small, round and cat-like.

In the *hind legs*, the hock should be well let down, but the hock joint need not be so strongly developed as in the Greyhound.

The make and carriage of the *tail* are important; it should be as fine as possible, with a gentle curve upwards at the end, and should never turn to one side.

This dog is of many colours; the different shades of fawn are most prized, but chiefly the golden fawn. The dove-coloured fawn, the blue fawn, and cream-colour are admired, but not so highly. The fawn-coloured dogs may have black muzzles, or blue muzzles. Black, red, yellow, plain white, and blue are allowable colours. Party-colours, such as white and fawn, and white and blue, are not so desirable. Except in the party-coloured dogs, there should be no white on the legs or tail; a star on the forehead or breast is however less objectionable.

The Italian Greyhound should not weigh over 12 or 13 lbs.; but the lighter the dog, the more he is valued in this country, and 8 lbs., or even 6 lbs., is not an uncommon weight. The height of the Italian Greyhound should bear a proportion to his weight. A well-bred dog of 9½ lbs. weight stood exactly 15 inches in height at the shoulder, but a heavier dog would not be tall in proportion.

Other Varieties of the Greyhound.

Greyhounds are to be found in many countries; but in none has so much attention been paid to the breed as in England, and nowhere, consequently, is so perfect a Greyhound to be found.

In Greece, this dog has long, wavy hair, and a tail like a Setter's, and appears from the portraits of him, my only means of judging, to be a handsome animal.

The Russian Greyhound hunts by scent as well as by sight; he is a tall, strong dog, and, though wanting in pluck, is said to be used in the chase of the wolf.

The Persian Greyhound has been sometimes brought to this country, more I imagine from the singularity and beauty of his appearance, than for any use he could be put to in coursing. His coat is hairy, and his tail remarkably fine and silky.

The Lurcher.

This term is applied to a cross between the Greyhound and Sheep dog, and which partakes of the form of both parents. He possesses great intelligence, considerable speed, and a good nose, and is therefore a most useful servant to the poacher. It was formerly the custom to cut his tail off, that he might pass muster as a sheep dog. He catches hares on their forms, and steals up to rabbits while on the feed, suddenly dashing on them, and seizing them. The Lurcher is sometimes taught to retrieve, and has been known to hunt by himself, and bring the game to his master's cottage. Consequently he is a most destructive poacher, and the gamekeeper shows him no quarter. The Lurcher produced by a cross between the rough Greyhound and the Colley, is noticed under the head "Highland Deerhound."

CHAPTER II.

HOUNDS.

THE FOX-HOUND.

THIS hound, which has nearly superseded all other breeds of dogs, except the Beagle, in the chase of wild animals in this country, has arrived at his present perfection, by nearly two centuries of careful breeding; yet the Fox-hound is perhaps the most modern breed of hounds in England.

At a time when deer-hunting and hare-hunting were much followed, fox-hunting was comparatively unknown. It could scarcely be otherwise when we consider the slow pace of the ancient breeds of hounds, which could never suffice to run down an animal like the fox, who can always find a safe retreat in the first drain or rabbit-hole he comes to. In addition to this, the scent of a hunted fox, unlike that of the hare, gets colder in proportion to the distance over which he has run; and hounds which lose their time by dwelling on the scent at the beginning of the chase, as the old breeds are said to have done, could scarcely hope to overtake him at all.

It is generally supposed that the modern Fox-hound is inferior in scenting powers to the ancient

breeds; there is now no certain means of establishing this fact; but in speed, beauty and *dash*, he is undoubtedly superior.

It is impossible to improve upon the excellent description of the Fox-hound given by Beckford eighty years ago, and I can do no better than quote his own words :—" You desire to know what kind of hound I would recommend. As you mention not for any particular chase or country, I understand you generally; and shall answer that I most approve of hounds of the middle size. I believe all animals of that description are strongest, and best able to endure fatigue. In the height, as well as the colour of hounds, most sportsmen have their prejudices; but in their shape, at least, I think they must all agree. I know sportsmen who boldly affirm that a small hound will oftentimes beat a large one; that he will climb hills better, and go through cover quicker; whilst others are not less ready to assert that a large hound will make his way in any country, will get better through the dirt than a small one, and that no fence, however high, can stop him. You have now their opinions; and I advise you to adopt that which suits your country best. There is, however, a certain size best adapted for business, which I take to be that between the two extremes, and I will venture to say that such hounds will not suffer themselves to be disgraced in any country. I perfectly agree with you, that to look well, they should

be all nearly of a size; and I even think that they should all look of the same family.

"There are necessary *points* in the shape of a hound, which ought always to be attended to by a sportsman, for if he be not of a perfect symmetry, he will neither run fast nor bear much work. He has much to undergo, and should have strength proportioned to it. *Let his legs be straight as arrows, his feet round* and not *too large*; his *shoulders back*; his breast *rather wide than narrow*; his *chest deep*; his *back broad*; his *head small*; his *neck thin*; his tail thick and brushy; if he carry it well, so much the better. Such hounds as *are out at the elbows*, and such as are *weak from the knees to the foot*, should never be taken into the pack.

"I find that I have mentioned a small head as one of the necessary requisites of a hound; but you will understand that it is relative to *beauty only*, for as to *goodness*, I believe large headed hounds are in no wise inferior. The colour I think of little moment."

There are two important points in the Fox-hound, not noticed in Beckford's description; namely, the depth of the back-ribs, which is as essential to stoutness in the Fox-hound as it is in the horse—and the length of the thigh, which is always seen in well-bred Fox-hounds, and which, Mr. Apperly well observes, "like the well-let-down hock of the horse, gives them much superiority of speed, and is also a great security against

laming themselves in leaping fences, which they are more apt to do when they become blown, and consequently weak."

A medium size is considered by Mr. Apperly (Nimrod) to be 23–24 inches for dog hounds, and from 21 to 22 for bitches.

The opinion of the late Mr. Assheton Smith upon the subject of the size of hounds is most valuable. When he succeeded Lord Foley, in 1806, in the mastership of the Quorn Hounds, he was in favour of small hounds; the largest dog hound in the Quorn pack was then under 23 inches; but he found that these small hounds could not jump over the fences that were too thick for them to creep through, and he soon raised the standard of dog hounds to 25 inches in height, and of bitches to 23. With hounds of this size he afterwards hunted the light Hampshire country; but he subsequently lowered the standard to suit the country, and the height of the dogs in the kennels of Tedworth now ranges from 23½ to 24 inches, and that of the bitches averages about 22½ inches.

The kennel management of hounds is treated of elsewhere.

The Harrier.

The true Harrier is now seldom used; either a thoroughbred small Fox-hound is employed, or a cross between this breed and the Harrier. A

great revolution in hare-hunting was introduced by Mr. Yeatman: this gentleman used a breed of fast, dwarf Fox-hounds, by which the hare was forced to trust entirely to her speed, abandoning her usual doubles and turns. Hare-hunting after this fashion could scarcely be followed with the old breed of Harriers, which were distinguished for the melody of their cry and the delicacy of their scenting powers, rather than for their dash and speed. In the old-fashioned breed the height was about 23 inches; the modern hound seldom exceeds 20.

The points of the modern Harrier and Fox-hound are the same.

The Beagle

Has degenerated from want of care in breeding him. There are few packs now kept for hunting the hare, in comparison with the old times, but the Beagle is still used for covert shooting, many sportsmen preferring him to the Spaniel.

There are three varieties of the Beagle, namely:—the Common Beagle, whose height is generally 13 or 14 inches: the *head* large and round, and rather deep than broad or long, the nose square, the ears full and drooping; the *throat* full; the *legs* muscular; the *shoulder* well developed and strong; the *tail* like that of the Fox-hound, but with more brush, and not carried so high; the *coat* fine, except on the quarter. They resemble the old-

fashioned hounds in their fine scenting powers, their musical cry, and their slow pace.

The Rabbit Beagle seldom exceeds 12 inches in height, but is sometimes as low as 10 or 8. His forehead is higher than that of the common Beagle, his flews not so marked, and his throatiness less developed. His frame, though sufficiently compact, is much more delicate than that of the larger variety. In their style of hunting, the two kinds resemble each other.

Another variety of this hound has a rough coat, and does not possess the musical tongue of his race; he is therefore presumed to be a cross between the common Beagle and the rough Terrier. This breed, however, seems to be of some antiquity, as I find the Wire Haired Beagle particularly commended by the old writers on hunting. The rough breed averages in height between 12 and 15 inches.

A cross with the Beagle and Terrier makes an excellent Retriever, and can be trained as perfectly as the Common Retriever, bred between the Setter and the Newfoundland, and, from his smaller size, is far more manageable.

The Stag-hound.

The modern Stag-hound is a tall Fox-hound of about 25 inches in height. The ancient breed is quite extinct; it was, I believe, last used in the Devon and Somerset pack, to hunt the wild red deer.

The old hounds have often been described to me as large white and yellow dogs, of the old Talbot breed; they were heavy and slow, but able, from their exquisite scenting powers, to give the stag a grace of an hour or more, and kill him afterwards.

The music of their tongues is spoken of as magnificent. In hunting water, they were perfect, which is essential in this wild kind of sport, as the deer frequently runs for miles in shallow water, and indeed is generally killed there, a Stag seldom being taken on land.

Wild red deer hunting is still followed in North Devon; but the hound now in Mr. Bisset's pack is the Foxhound, of the height of 26 inches.

The method of hunting now adopted, is to unharbour the deer with slow hounds called, "Tufters," which are a breed crossed chiefly with the Bloodhound. When a Stag is tally'd away, the Tufters are stopped and the pack laid on. The pace is generally very fast; and if the deer has had any start, the run often lasts several hours. Nothing is wanting to render this description of hunting the finest in the world, except a better country to hunt over.

Hunting the carted stag, as practised near London, is an amusement very different from this. The hounds used in Her Majesty's and Baron Rothschild's kennels are Foxhounds, 24 or 25 inches in height. This kind of Stag-hunting has, however, advantages of its own, which compensate for its tameness in some respects: there is no uncertainty

in the find, and there is generally a sure prospect of a sharp gallop over a stiff country, and these recommendations are often sufficient to bring together fields of some two to four hundred assistants and spectators.

The Otter-hound.

The Otter is now often hunted with packs of nondescript hounds. A Bull-terrier, crossed with the rough Scotch or Skye Terrier, makes an excellent dog for this purpose. There are a few packs, however, where the true breed is preserved, and many more where the hounds are in part descended from it.

In real Otter hounds the *forehead* is high, the ears long, full and pendulous, and set far apart on the head.

The *height* is about that of an ordinary Fox-hound.

The *coat* is rough and wiry, but comparatively smooth on the upper part of the head; above the jaws it is thick, as in the Deerhound or Scotch Terrier. The colour varies in different packs, but is generally sandy or reddish.

The *jaw* is deep and strong, and the frame powerful. Their note is deep and melodious.

This breed, unlike other hounds, is savage and quarrelsome, and it is sometimes difficult to keep the peace in their kennels.

These fine animals probably more nearly resem-

ble the ancient breeds of English hounds, than any we now possess: they are admirably represented in Landseer's well-known picture, "The Death of the Otter."

The Bloodhound.

The modern Bloodhound is still occasionally employed for the purpose of tracking the wounded fallow-deer; but he is far more commonly kept as a companion, for which his noble appearance, his intelligence, and high courage well adapt him. His temper, however, is not all that could be desired; for he is easily irritated, and is then dangerous from his size, great strength, and uncertain temper. In consequence of the Bloodhound having been chiefly bred with a view to ornament, his more useful qualities seem to have been neglected; for, judging from the performances of the modern dog, there is some difficulty in crediting the stories which are told of the Bloodhound of former times. The scenting power of the bloodhound of the present day does not appear to me, from the experience I have had, to be greatly superior to that of other hounds, and is very far removed from that unerring faculty which is the theme of most writers on the subject.

According to Mr. Grantley Berkeley, who has probably had more experience of this dog than any one else, the following are the points to be looked for in the modern Bloodhound:—*height* from 24 to

25 or even 26 inches: *forehead* high, long and narrow: *ears* from 8 to 9, or even 10 inches long: *lips* loose and hanging: *throat* loose and roomy in the skin. The Bloodhound should be deep in the brisket, round in the ribs; he should have broad and muscular loins; legs and feet straight; hind quarter muscular; stern, or tail, tapering and graceful. His *colour* should be black-tan, or deep and reddish fawn, with no white but on the tip of the tail.

The *note* should be loud, deep, and melodious.

Bloodhounds might be used with great advantage, where much game is preserved, in tracking poachers. The Bloodhound does not worry, or even touch the person upon whose track he is placed, unless he is himself attacked; and is, in addition, trained to keep pace with the person who hunts him. The knowledge that they were liable to be followed to their homes, would do much to deter poachers, and might have some effect in putting an end to the constantly recurring conflicts between poachers and keepers.

The Bloodhound requires a special training in following a foot scent, and indeed, any dog with a very fine nose might equally be taught. Colonel Hutchinson mentions an instance of the advantage of employing Bloodhounds for this purpose: "At two o'clock on a frosty December morning in '44, when the wind blew bitterly cold from the east, Mr. B——e of S——d, Warwickshire, was called up by the keepers of a neighbour, Mr. W——n,

and informed that some poachers were shooting pheasants in a plantation belonging to Mr. B——e, whose keepers were on the look-out in a different direction. They and Mr. W——n's had agreed to work in concert, and mutually assist each other.

"Mr. B——e instantly dressed, and went out with his brother (Captain B——e) and the butler, making a party of eight, including Mr. W——n's keepers. They took with them a couple of trained Bloodhounds, in long cords, a regular night-dog, and a young Bloodhound which had broken loose, and, unsolicited, had volunteered his services.

"On entering the plantation, it was found that the poachers, having become alarmed, had made off. Two of the keepers remained to watch. The Bloodhounds were laid on the scent. They took it up steadily, and the rest of the party followed in keen pursuit. As the poachers had not been seen, their number was unknown, but it was supposed to be about six, by the report of the guns.

"Notwithstanding the cold east wind and sharp frost, the hounds hunted correctly, for about three miles, across fields, and along footpaths and roads, until they came to a wood of about 300 acres. They took the scent into the heart of it, evincing great eagerness. Here the hunt became most exciting, for the poachers were heard in front, crashing through the branches. A council of war was held, which unluckily ended, as many councils of war do, in coming to a wrong decision. It was resolved to

divide forces, and endeavour to head the enemy. Captain B——e, two men, and one of the old hounds, turned down a ride, towards which the poachers seemed to be inclining, while the others continued the direct chase. The poachers, however, soon broke cover, but had not run across many fields ere they were overtaken. The clear, bright moon showed eight well-armed men, rather a disproportionate force for the attacking three. A fight ensued. The young hound and the watch-dog were shot. Mr. B——e was lamed, and his two men being a good deal hurt, the poachers triumphed, and resumed their flight. On Captain B——e's rejoining the baffled party, the pursuit was renewed for nine miles, the dogs carrying the scent the whole way into Coventry, where they were stopped.

"It was now half-past seven. Many early risers were about the streets; the police offered to point out the poachers, provided their identity could be sworn to. The hounds were stopped. Two men were apprehended (a third escaped from the police), were lodged in jail, and subsequently convicted and sentenced to eighteen months' hard labour. As they had not been seen until the time of the scuffle, which took place fully five miles from Mr. B——e's plantation, the only evidence to show they had been poaching there was furnished in the undeviating pursuit of the hounds. The remainder of the gang fled the country."

Directions for training the Bloodhound are given under the head TRAINING.

THE SOUTHERN HOUND, TALBOT AND NORTHERN HOUND.

These were the three chief varieties of hound known in former times, and are the progenitors of our modern breeds. These dogs were all slow, deep-mouthed, heavy hounds; but the Northern hound was inferior in these qualities to the Southern hound, or hound of the south of England and Devonshire, though superior to him in speed. The Talbot seems to have been something between the Northern and Southern hounds; but the accounts we possess of this breed differ greatly.

CHAPTER III.

TERRIERS.

The English Terrier.

There are two varieties of this dog:—one, used as a toy dog, and bred with a view to his ornamental points; the other, a heavier, stronger and gamer dog, which has probably at some period received a cross of the Bull-dog.

In the Toy Terrier, the *colouring*, which is always black and tan, should be deep and rich: the *coat* should be fine and exceedingly glossy, and not a single white hair should be seen on any part of it.

The *palate* and *nose* should be black. The *ears* are generally cropped; and some importance is attached to the way in which the operation has been performed.

The *legs* should be light, but strong and straight: the feet fine, round and split up like a hare's. The *tail* should be thin in bone, with little hair, and should be carried low.

The *head* should be narrow, high in the forehead, and the jaw strong, but tapering to the nose. The eye small and bright.

The *chest* should be deep, and the neck and shoulders well covered with muscle but not heavy.

The London fanciers have crossed the Toy Terrier both with the Italian Greyhound and the King Charles's Spaniel: the latter cross destroys all symmetry of shape and beauty of coat, and the result is a short-nosed, large-eyed dog, with loose skin, and a thick coat, pretty enough in his way, but without any of the characteristic points of the Terrier.

As a general rule, the *eye* should be the first point looked at in the Terrier; and if it be full and prominent, or watery, the dog may be rejected at once.

The cross with the Italian Greyhound is difficult to detect; but long, thin legs, the back ribs much caught up, and a shrinking timid manner in the dog may be always suspected as evidences of this cross.

The weight should not be over 6 lbs., but is often only 3 or 4 lbs. At the dog show held in December 1860 at Birmingham, the maximum was fixed at 5 lbs., but I have seen a full-grown Toy Terrier which weighed only 1½ lb.; so small a dog as this, however, is an abortive and imperfect animal, he seldom lives longer than a few months, his intellect is defective, his body stunted and weakly, and he can afford no rational satisfaction to his possessor.

The larger English Terrier has all the points of the toy dog, from which he only differs in possessing greater size, strength, and pluck. He is oftener, however, white, or white with red or black patches; and this, together with his greater courage, has led to

the supposition that he has some Bulldog blood in him, though he does not possess those marks which betoken a near cross with that breed, and which I shall mention when describing the Bull-terrier. The English Terrier averages in weight 8 lbs.

The Bull-terrier.

It is a current axiom among dog fanciers that no gameness can be got in any dog, without a taint, or cross, of the Bulldog. The Bull-terrier is a signal proof of this theory; for the pure Terrier, though active, is by no means distinguished for pluck; whereas the Bull-terrier is scarcely inferior in this quality to the Bulldog himself, and in vivacity and activity he surpasses him.

The Bull-terrier varies greatly, according to the predominance of either the Terrier or the Bulldog blood. It is difficult, however, to decide from the appearance of the dog, how much he owes to each breed. As a rule, when the nose is short, and the jaw much underhung, the bulldog predominates; but this is not invariable, for it is no unusual to see both long and short faced puppies in the same litter of Bull-terriers.

There are certain marks by which the Bull-terrier may always be distinguished: namely, a great breadth of *jowl*, which gives enormous power to the grip; depth in the *brisket* and *chest*; a peculiar roundness of the *stifle-joint*, which is slightly turned

out, accompanied by a well-let-down *hock*; but the most characteristic and unmistakeable point is the small *eye*, which becomes round the moment that the dog's attention is excited; the pure terrier's eye always remains long and narrow. A Bull-terrier, in addition to these points, should have straight *legs*, and strong, well developed *hind quarters*.

His *shoulders* should be particularly well covered with muscle; his *neck* should be lean and hard; his *loins* strong; and his *tail* fine, and not carried high. His *height* varies from 10 to 20 inches, and he weighs from 10 to 30 lbs. or even more. The best *colours* are pure white, and pure red, or white with patches of brindle. Black and tan, white and tan, and brindle, are often seen.

For every quality which makes the dog a valued companion to man, the Bull-terrier is unsurpassed by any other breed. He will hunt for him, watch his house, and fight for him; he is teachable and intelligent; he is the best-tempered companion and the most faithful friend.

The Blue Paul

Is a dog known only among the dog-fanciers of London, and I believe that the original breed is now either extinct or extremely rare; but the strain is still highly valued.

The Blue Paul stands about 14 inches at the shoulder; his *colour* is invariably blue; his *head*

large and long; his *shoulder* very straight; his *neck* and *back* long. In other points he resembles the Bull-terrier. This dog is distinguished, even among Bull-terriers, for his courage and strength.

There is an odd story very general among the fancy, that the original breed was brought to this country by Paul Jones, the pirate. The breed was formerly to be met with in Scotland.

The English Rough Terrier,

Sometimes erroneously called the Scotch Terrier, differs in nothing but his coat from the smooth variety. His nose is a trifle shorter, and he is a hardier, and perhaps a gamer dog. In this breed, the *coat* should be wiry and hard, and, though rather curly, should not be too long, woolly and matted, as in some strains. On the legs, the hair should be much closer than on the body. The *ears* are generally cropped, and the *tail* cut. The *colours* are black-and-tan and white; a sandy red is not unusual, and a grey or pepper-colour is considered good.

The English rough Terrier differs from the Scotch Terrier principally in the greater length of his legs and the shortness of his back. The size varies, but the *height* should not be over 15 inches.

This is an excellent vermin and rabbit dog for the country: like all Terriers, he is very keen in hunting, and is a clever, companionable animal.

The Fox Terrier

Is the rough Terrier with a very decided cross of the Bull-dog. This was the breed of dogs formerly used to accompany packs of foxhounds, for the purpose of bolting the fox when he had run to ground. This dog is often to be seen at the heels of the gamekeeper; indeed, there is not any keener or gamer vermin killer than the Fox-terrier. Such a dog, under proper training, is invaluable to the keeper.

I knew a case of a Fox-terrier, who was either broken not to notice game, or else did not do so from choice. He used to hunt by himself, and killed amazing numbers of ground vermin, including rats, than which, I may observe, few animals are more destructive to game. He never entered the coverts, but stole along on the outskirts. At night-fall he accompanied the keeper when he set his traps, and in the morning never failed to revisit them of his own accord, killing any captured animals he might find.

The endurance and pluck of the Fox-terrier may be estimated from the fact of his being able to keep up with a pack of foxhounds during a run, and to bolt the fox from his earth at the end of it.

The Scotch Terrier

Is a shorter-legged, and generally a heavier dog than either of the preceding varieties. He is

equally plucky and clever, but not so active, and from this, and his thicker coat, is not so serviceable in hunting rabbits.

His *hair* is long and matted, and often soft and silky. His *colour* is usually a rich black and tan, sometimes mixed with dark grey; it is impossible to look at his coat and colour and not suspect a cross with the Colley. In *height* he is seldom over 14 inches, but sometimes weighs more than 16 or 18 lbs. There are innumerable varieties of this breed.

The Dandie Dinmont

Is a long, low-backed dog, with great strength in the *shoulders*, broad muscular *legs*, a long, large *head*, strong *jaws*, and full bright *eyes*, often of a hazel colour; his *forehead* is high, and his *ears* pendulous, set far apart, and back on the head. The *hair* on the top of the head should be smooth, but not silky, and the jaws hairy, like those of the Deerhound. The *hair* on the rest of the body is hard, very wiry, rather straight, and neither long nor matted. The *tail*, which is carried rather higher than in other terriers, should be straight, or have only a very slight curve upwards. The *colour* is either "mustard" or "pepper;" no other colour is allowable, and any white is highly objectionable. The *weight* of a pure Dandie is never less than 16 lbs.; but the breed is now in such demand as house-pets, that terriers weighing only 8 or 10 lbs.,

with short heads, prick ears, drooping tails, and silky coats, are often passed off for real Dandie Dinmonts. Such dogs as these are evidently produced by a cross with the Skye Terrier.

There are, however, at the present day, at least two varieties of the Dandie; one of which has a stronger, heavier frame, and is generally of the "mustard" colour; the other, which is usually "pepper" colour, is shorter in the leg and quicker and keener in its movements. Both these strains are equally valued.

The Dandie is a dog of great sagacity and beauty, and quite worthy of the estimation in which he is held.

The Skye Terrier.

The varieties of this breed are innumerable. In the island of Islay alone there are four distinct strains of Skye Terrier, all kept distinct and all highly esteemed.

The general characteristics of this dog are—a long *body*, very short *legs*, long *neck*, and *ears* which generally stand out slightly from the head. In deciding upon the purity of any breed of Skye Terrier, the following points should be looked to: his *coat*, which should be long, wiry, and straight; his *eyes*, which should be bright and keen, but not prominent; his *tail*, which should be carried in a line with the back; his *legs*, which should be straight, and not clumsy in the foot; the *hair over his eyes*, which

should be abundant; his *colour*, which should be either slate-colour or fawn; black is not uncommon, but is objected to in Scotland*. A cross with the Spaniel or the Maltese Terrier is often resorted to by dog-fanciers; but it is to be objected to, as it makes the hair soft and silky, and spoils the courage.

There is no pluckier vermin dog than the Skye Terrier. In the Hebrides he is used as an Otter-hound. For this purpose, a pack of from eight to a dozen of these little dogs is employed, which are able, from their small size, to follow the otter and attack him in the crevices of the "cairns," or piles of loose rock on the sea-coast, in which he makes his retreat. The otter is quickly driven out, and generally shot in attempting to reach the sea. As there is no harder-biting animal than the otter, the employment of Skye Terriers in hunting him is a sufficient proof of their pluck. I have myself seen two of these little dogs hanging on to the neck of the otter, and thus saving him from the guns of the sportsmen, as he scrambled from the rocks into the sea.

* In the Hebrides, the terms *blue* and *yellow* are applied, in reference to Terriers, to colours which are properly slate-colour and fawn.

CHAPTER IV.

POINTERS AND SETTERS.

The Spanish Pointer.

The Spanish Pointer, once used in this country, was a heavy, large, unwieldy dog, with a wide nose and deep flews. He was a fine scenting dog, very staunch, and easily broke, but wanting the compactness, beauty, and speed of the modern Pointer.

At the time when a high range was not required, he might have been useful; but would be utterly unable, from his shape and clumsiness, to go over one-tenth part of the ground travelled over by the Pointer of the present day. As this breed is now never used, I shall give no further account of it, but proceed to consider its descendant,

The English Pointer.

This dog has been brought to a state of perfection far surpassing his progenitor. He has undoubtedly been crossed with the Fox-hound, but this cross is very slight, and any resemblance to the Fox-hound, particularly in the tail or colour, is to be guarded against.

The *colour* of the Pointer varies greatly; the prevailing colour is white, with little spots or ticks

of black, liver-colour, lemon-colour or yellow: the pure liver, or pure black, though the last was once in high estimation, are objectionable, as being less easily seen against a dark background.

The Pointer should have an intelligent-looking countenance. The *nostrils* should be deep. The *head*, if anything, large. The *neck* should be long, with a strong development of muscle; and the *chest* should be deep and wide. There should be great strength in the *loins*; and, as in the Fox-hound, the *back ribs* should be deep, to ensure stoutness. The *shoulders* should be high, slanting backwards, and muscular; the *fore-hand* should be deep, and the *legs* have plenty of bone, and be as straight as arrows; the *elbow* should lie square with the body, neither turning out nor in, and should be well detached from the ribs; the *feet* should be round and small, pointing forwards, and the *soles* thick and hard. This last point should be carefully inspected before purchasing a Pointer, as a dog with every other good quality is often unable to do a long day's work from having thin or defective soles. The *hind-quarter* should be lengthy and sinewy; the *hock-joint* strong in bone and well let down. The *tail* is the principal index to purity of breed; it should be strong, but small in the bone and thin, and should taper to a fine point; there must be no approach to the bushy tail of the Fox-hound. The smallest amount of tan in the Pointer is also thought to indicate too near a cross with the Fox-hound,

though I have known excellent dogs with a good deal of this colour about the head. A very fine *coat* is considered a mark of high breeding; but dogs well covered with hard, wiry hair are generally the hardiest and most useful.

The size of Pointers varies greatly; at the Birmingham dog show, held in 1860, dogs above 55 lbs. were classed as large.

The Portuguese and French Pointers

Scarcely deserve a separate notice. The Portuguese Pointer I have never seen; but all accounts agree in describing him as a comparatively useless animal.

The French Pointer is often a dog of exquisite scenting powers, but is seldom well-trained, and never taught to range properly.

The English and Irish Setters.

These two varieties differ but slightly from each other in shape; but the Irish dog stands a little higher on his legs, and is said to be the hardiest breed of the two. In *colour*, the pure Irish Setter is dark red, of two shades, one being nearly black, and the other a kind of chestnut; he should have little or no white about him. According to Youatt, he may also be lemon-colour, or white patched with deep chestnut, provided he has a black nose and palate; but it is a question whether dogs with

these colours have not been crossed either with the Pointer or the English Setter.

The English Setter has evidently much of the Pointer about him, for he has all the colours peculiar to that breed; namely, white as a predominating colour, spotted, and sometimes ticked with lemon-colour, liver, yellow, red, or black, &c.

The coat should be wavy; but neither very curly, like the Water-spaniel, nor so thick as in the Newfoundland. As this dog is chiefly used on rough ground, which is unsuited to the feet of the Pointer, his legs should be well feathered, and his feet clothed with hair, as a protection from heather and thorns.

The "flag," or tail, should be well furnished with hair, which should droop, rather than be thick or bushy.

In form, the Setter resembles the Pointer; but his *head* is smaller, the *jowl* less developed, the *loins* apparently not so strong, and he is altogether a lighter, leggier, and less compactly made dog; notwithstanding which, he is faster, has a freer range, and can stand more work. For this reason he is preferred on the moors, while the Pointer, being usually under better command, is employed for partridge-shooting in enclosed country. The nose of the Setter is also unquestionably inferior to that of the Pointer; but as the scent of the Grouse is strong, compared to that of the Partridge, this defect is counterbalanced by the freer range.

In intelligence, if not in docility, the Setter greatly surpasses the Pointer, and performing-dogs of this breed may sometimes be seen in the streets of London. The Setter also makes an excellent companion, unlike the Pointer, who is a stupid and uninteresting dog when not in the field.

The breaking of the Pointer and Setter is described elsewhere.

The Russian Setter

Was at one time much in fashion, and even considered superior to our native breeds, but for some reason or other, this breed is now seldom heard of in this country.

In shape, the Russian Setter resembles the English dog, but is covered by a long, matted coat, which hangs over and partly conceals his eyes, like that of a Skye Terrier. He is said to be remarkably staunch, and to possess an excellent nose.

The Dropper

Is a cross between the Pointer and Setter. The Dropper has the good points of both dogs, but it is seldom possible to breed directly from him with any good results. On this account, probably, he is not common at the present day. A Dropper from a Pointer dam, with a Russian Setter sire, is spoken of as being an excellent dog.

CHAPTER V.

SPANIELS:

A CLASS of dogs whose general characteristics are large hanging ears, a long silky coat, and a gentle, timid, and affectionate disposition. Spaniels may be divided into Land Spaniels, Water Spaniels, and Toy Spaniels. The Land Spaniels may be again divided into Cockers and Springers.

THE COCKER

Is the smallest description of Spaniel used in the field. There are so many varieties of this useful and active little dog, that it is impossible to give any specific description of it.

In *weight*, the Cocker averages 15 lbs. His *head* is rounder and his *nose* more pointed than those of other breeds of Spaniels. The *ear* is light for a Spaniel, and the hair upon it should be comparatively thin. His *coat* should be wavy and thick. The *colour* is either black and white, pure black, liver-colour and white, or red and white. Some excellent breeds, such as the Welsh and Devonshire Cockers, are pure liver-colour. Black and tan is not uncommon, but is not a favourite colour.

The Cocker is very eager in hunting, and gives

tongue rather too freely; he is chiefly used in woodcock-shooting, where extensive woodlands require to be hunted quickly: in pheasant-shooting, the heavier and less noisy breeds are employed.

The Springer

Is heavier, slower, and more easily kept within range than the Cocker. Several distinct and valuable breeds are comprised under this head; namely, the Clumber, the Sussex and the Norfolk Spaniels.

The Clumber.

This is the largest variety of Spaniel, weighing sometimes as much as 30 lbs. He is a low, strong-limbed, broad-backed dog; and is remarkable for never giving tongue. His *colour* is always either lemon and white, or yellow and white. The *coat* should be thick, the *legs* well feathered, and the *feet* round. The *head* is square and heavy, the *muzzle* broad, and the *ears* long. This dog is highly valued for battue-shooting.

The Sussex Spaniel

Has a general resemblance to the Clumber in height and shape. His *head* is, however, lighter, and, in consequence of this and his rich liver-colour, his whole appearance is handsomer. He gives tongue freely.

The Norfolk Spaniel

Is perhaps the commonest breed in England; he is smaller than either of the two last-mentioned dogs, generally averaging 16 inches in height. In *colour* he is black and white, or liver and white. It is quite impossible to give a particular description of a dog which varies so greatly as the Norfolk Spaniel.

The training of the Land Spaniel is described under the head "Training."

The Water Spaniel

Has a body covered with short, crisp curls, long and deeply-fringed *ears*, *body* round and compact, and *legs* very strong, with broad and spreading *feet*, which enable him to swim with ease. The *tail* should be curled to the very end; not fringed and fan-like, as in the Setter. The *head* is long, the *face* smooth, the *forehead* high, and furnished with a small tuft of hair, or top-knot. The *height* varies a great deal. In *colour*, he should be a brown-liver; but liver and white is not uncommon.

The Water Spaniel is the best water-dog in the world, taking to the water readily in the coldest weather, and swimming and diving with the greatest ease. In duck-shooting he is invaluable, and his intelligence and great docility render him capable of receiving the high training which is required in this kind of sport. In fidelity and affection

towards his master, he is not surpassed by any breed of dogs in the world; but, unfortunately, his thick, oily coat unfits him for being a house-dog.

In Ireland, where waterfowl-shooting is commoner than in this country, there are several excellent strains of Water Spaniel. Of these, the variety known as "M'Carthy's" may be taken as a type. I extract the following description from the 'Field' newspaper:—

"The present improved and fancy breed, called M'Carthy's breed, should run thus:—Dog from 21 to 22½ inches high (seldom higher) when pure-bred; head rather capacious, forehead prominent, face from eyes down perfectly smooth, ears from 24 to 26 inches from point to point. The head should be crowned with a well-defined top-knot; not straggling across, like the common rough water-dog, but coming down in a peak on the forehead. The body should be covered with small, crisp curls, which often become daggled in the moulting season; the tail should be round, without feather underneath, of the two rather short, and as stiff as a ramrod; the colour of a pure puce-liver, without any white. Though these dogs are generally of very high mettle, I have never found them intractable or difficult to be trained; they readily keep to heel and down-charge, and will find a dead or wounded bird anywhere, either in the open or in covert; but they are not partial to stiff, thorny brakes, as the briars catch the curl and

CHAPTER VI.

SHEPHERDS' DOGS.

The English Sheep-dog.

This dog has a longish *head*, with a sharp *muzzle*, and a good breadth over the *forehead*. His *ears* are slightly raised; his *coat* coarse and woolly. The *tail* is long and bushy, but is generally cut off even now, when the Excise Laws no longer require it, and this gives the dog an awkward, clumsy appearance. His *size* varies greatly.

The English Sheep-dog does not possess all the fidelity and sagacity of the Colley, but he is a teachable and intelligent animal, as any one may satisfy himself of by watching his manœuvres in driving sheep. In temper he is treacherous and savage, but not by any means courageous, and I have seen a little Scotch Terrier put one to an ignominious flight.

The Drover's Dog

Is a larger and stronger breed of Sheep-dog. His usual *colour* is black and white, or white and brown. He is an ugly, ungainly-looking animal, and not improved by the want of a tail, which is

invariably cut off. So great are the strength and courage of these dogs, that I have seen one of them attack an ox, maddened with driving, while he was running loose in the streets, and hold him by the nose until he could be secured. It is said that there is a cross of the Mastiff in some of these animals, which is highly probable.

THE COLLEY.

The Colley is a smaller, lighter, and more graceful dog than the English Sheep-dog. His *body* is remarkably compact, his *muzzle* very fine, and his *eyes* large and clear: his *legs* are strong and well set on. His *coat* is thicker than that of any other British dog, standing out two inches or more on his sides and round his neck, where it forms a sort of ruff.

Few dogs surpass the Colley in intelligence, and, as he has the advantage of patient and judicious training, he is unequalled in his utility to man. The only dog to be compared to him for sagacity is the Poodle; but there is this difference between them, that the performances of the Poodle, who has little affection for his master, consist in useless tricks, which he goes through without much exertion to himself, and with the prospect of an immediate reward,—while the Colley spares himself no trouble in his master's service, and seems to act from a sense of duty alone.

I once saw a Colley, in the Highlands of Scotland, left in solitary charge of a flock of sheep, which were feeding in a field separated only by a ruined wall, full of wide gaps, from a field of young corn. I watched the dog for some time: he had taken his stand on a hillock, from whence he could overlook the whole field, and check the slightest attempt to break fence on the part of the sheep. I was told by the person who accompanied me, that the dog remained patiently and watchfully at his post from the earliest dawn to nightfall, and brought the flock home in the evening on hearing the shrill whistle of his master, who lived nearly a mile away. What extraordinary intelligence and what a strict sense of duty must this dog have possessed!

The training of the Colley is perfect, and no sportsman has his dogs under such complete command as the Highland shepherd. Many of my readers must have noticed and, if they are sportsmen, envied the ease with which a shepherd, standing on a hill side, can direct every movement of his dog in the valley below him.

The Albanian Shepherd's Dog

Has been occasionally brought to England by officers stationed at Corfu. He is a large, handsome dog, either fawn or grey in *colour*, with a long, bushy *tail*, a pointed *nose*, and prick

ears. In *size* he almost equals a small Newfoundland.

The Albanians prize these dogs highly, and a story is told at Corfu, of an English officer who was murdered by the owner of an Albanian dog, which he had shot in self-defence. Although ferocious when in any numbers, the Albanian Shepherd's dogs possess little pluck, and I have myself seen a pack of six or seven refuse to attack a wild-boar at bay, when a small English Bull-terrier did not hesitate to run in single-handed and seize him by the ear. The Albanians use these dogs indiscriminately as shepherds' dogs, and for the occasional chase of the wild-boar; but, as they are only employed to force the boar from his cover before the guns of the hunters, there is generally no necessity for the display of much courage.

The Italian Shepherd's Dog.

The Italian Shepherd's Dog is a fine, noble-looking animal. Like the Sheep-dog of Albania, he is used both to assist in driving the flocks, and to guard them from the attacks of wolves and foxes. On this account, he is sometimes called the Italian Wolf-dog, but this term is inappropriate, as he wants both the necessary speed and endurance to overtake the wolf.

This dog is to be found, unvarying in appearance, along the whole slopes of the Apennines, from

Tuscany to Calabria, and is familiar to visitors to Rome, who may see numbers in the wild country which surrounds that city, where his large size, his long, shaggy coat, and his white or cream colour make him a conspicuous and picturesque object in the landscape.

Like the Albanian Sheep-dog, he is fierce and sometimes dangerous to strangers; but, like him, he is not courageous, and residents in Rome are advised to carry heavy hunting-whips in their rides into the Campagna, which are generally enough to keep them at a distance.

I have heard of several attempts to introduce the Italian Sheep-dog into this country, which have uniformly failed, probably in consequence of the dog being kept too warm. It should be remembered that this animal is covered with a very thick coat, and inhabits the cool mountain heights during the heats of summer, only coming down into the plains with the flocks in winter.

The Spanish Shepherd's Dog

Is also of large size, but varies much in different parts of Spain. In the Pyrenees, where wolves are numerous, and even bears are to be found, a very large breed is used. This dog resembles the Italian Shepherd's Dog in general appearance, but is darker in *colour*—often being of a grey, fawn, or iron-blue colour—and stands considerably higher. This breed

has been imported into this country, and the Scotch Deer-hound has been crossed with it, with some success.

THE MÂTIN.

Under this head is classed the Sheep-dog of France; but, by French naturalists, it is also made to include many other varieties of dog, such as the Lurcher, and Shepherds' Dogs generally.

The Sheep-dog of France varies with the locality in which he is found. He is in general a tall, gaunt-looking dog, of a yellow or fawn *colour*, with a broad *head* and drooping *ears*.

CHAPTER VII.

WILD AND HALF-RECLAIMED BREEDS.

The Esquimaux Dog.

The Esquimaux Dog is the only domesticated animal which can survive the rigorous arctic winter. Without him, it is not too much to say that no human life could be maintained in those latitudes. He is invaluable to the Esquimaux as a watch dog and an assistant in the chase; he draws his sledge, and carries heavy packs for him in winter, and, in summer, can procure his own subsistence without trouble to his master.

In appearance, the Esquimaux Dog so closely resembles the wolf, that experienced travellers in the regions where he is found are apt to mistake him for that animal, even at a short distance. Strange to say, he differs from all other dogs—except, perhaps, the Dingo, which I have never had an opportunity of inspecting—in having, more or less, the oblique eye of the wolf or fox; a resemblance which, I believe, has not been noticed by naturalists.

The best and most recent accounts of the Esquimaux Dog are to be found in Capt. McClintock's

narrative of the voyage of the "Fox" in the Arctic Seas. It was necessary, during the expedition, to take a large number of these dogs on board ship, for the purpose of dragging sledges over the ice. From Capt. McClintock's description of them, it appears that these dogs are never more than half-domesticated; their hardiness and powers of withstanding cold, he mentions as most remarkable.

During the winter of 1858–59, when the "Fox" wintered in latitude 72° N., and the thermometer frequently stood at 40° below freezing-point; when the chilling blasts were such, that no human being could be exposed to them and live—the dogs, says Capt. McClintock, stood it without apparent inconvenience, unless their fur happened to be thin. They lay buried in the snow, he adds, under the lee of the ship, then fast frozen in the ice, and required no other protection from the weather. Their power of sustaining life under the greatest privations makes them invaluable in regions where food is so scarce. To economize this food, or as a means of keeping them in better health, Capt. McClintock's dogs were fed only on alternate days. It seems that nothing came amiss to them in the way of food, and their voracity was extreme. Twenty-nine dogs, we are told, consumed their two days' allowance of seal's flesh (60 lbs.) in exactly forty-two seconds. It was found impossible to keep them in the ship, from their appetite for leather, &c. "One day," says Capt. McClintock, "I made one very happy

without intending it: I meant only to give him a kick; but my slipper, being down at heel, flew off, and the lucky dog ran off in triumph with his prize, which of course was seen no more." "They will eat any animal in the world," he says, "except raven and fox;" but he afterwards found reason to withdraw even this limitation to their voracity.

The dog of the Arctic Regions varies but little in the different countries in which he is found. The dogs of Iceland, Lapland and Siberia do not materially differ from the Esquimaux Dog, and resemble him in habits.

The Dingo,

Or native dog of Australia, is so wolf-like in its appearance, that Bewick describes it as the New South Wales wolf. The general *colour* of the upper part of this dog is pale brown, growing lighter towards the under parts; the hind part of the fore-legs and the fore part of the hinder ones are white, as are the feet; the *tail* is of a moderate length, somewhat bushy, but in a less degree than that of the fox.

The Dingo is found in every part of the continent of Australia, and does not greatly vary anywhere. He is sometimes found wild, and is sometimes domesticated by the Australian savages. There is now little difference of opinion among naturalists in this country as to the Dingo being indigenous

in Australia, and not imported into that continent by early discoverers.

The Indian Wild-dog.

The Common Wild-dog in Central India is the Dhole, a wolf-shaped dog, resembling the Dingo in appearance.

In the Deccan, or southern part of the continent of India, there is a Wild-dog of a reddish-brown colour, intermediate in size between the wolf and the jackal.

The Wild-dogs of Nepaul resemble the Deccan breed.

All these varieties have the prick *ears*, lank *body*, and elongated *head* of the wolf. They all hunt their prey in packs.

The Pariah Dog

Is the general scavenger of all the towns and villages in every part of the East. He is also to be met with in many towns of southern Europe.

I have seen troops of these dogs in Rome and even in Lisbon, acting the part of scavengers, and owning no masters. These half-reclaimed breeds of dog vary very slightly in appearance in different countries. Their characteristics are—a tall, gaunt *body*, prick *ears*, and a hairy *tail*, more or less turned up. The *colour* is usually a mixture

of red, brown, and whitish fawn. In India these dogs are often found away from towns, but seldom far from human habitations. They have been described to me as accompanying the Indian armies on their line of march, prowling about the camp in search of refuse, and often running down hares and foxes, in packs, for food.

The existence of these animals in the semi-domesticated condition in which they are found, is to be accounted for by supposing that the ancestors of these dogs have been domesticated in very early ages, and that their descendants have in time multiplied sufficiently to act as public scavengers —a very necessary service in the towns of hot climates, and for the performance of which service they have come to be tolerated by the inhabitants.

It is to their employment in this filthy office, and to their masterless, half-wild condition, that the abhorrence of the dog in all Eastern countries is to be ascribed: the dog is an unclean animal alike to the Jew, the Mussulman and the Hindoo.

CHAPTER VIII.

WATCH DOGS.

The English Mastiff

Is a truly noble animal both in appearance and character, and, in my opinion, preferable to the Newfoundland as a companion to man. He is extremely gentle and affectionate, attaching himself strongly to the persons about him.

It is now, unfortunately, extremely rare to meet with the pure breed, though it is by no means extinct, as some writers have supposed. The fact is, that this race is preserved with great care in some kennels in the country; but as these dogs are seldom seen in London or other large towns, they are generally imagined to be rarer than they really are*. The Duke of Devonshire, I believe, still possesses a fine strain of Mastiffs, as does also Lord Hertford, and there are, or were lately, some beautiful dogs of this breed in the kennels of Her Majesty. Such dogs as these, however, are very distinct from the loose-jointed, clumsy-looking, so-called Mastiffs which may sometimes be seen in the streets of London, and which seem to be esteemed in proportion to

* There was a tolerable show of Mastiffs at the Birmingham Dog Show of last year (1860), where the first prize was won by a fine dog belonging to Mr. Hanbury, of Eastrop, Wiltshire.

their size, while every other point, such as compactness and symmetry of form, is entirely disregarded.

The really fine strains are by no means bred of a very great size, 25 or 26 inches being the utmost height of a pure-bred Mastiff.

The points of the Mastiff are, a smooth *coat*; a large *head*, with a good breadth in the forehead, the *eye* rather small, and overhung by the brow, the *flews*, or lips, hanging low, the *muzzle* very slightly underhung; his *legs* should be straight and very muscular. In a good specimen, the *shape* is the very perfection of symmetry, combining enormous strength with great activity. He should be deep in the *chest*, and exceedingly strong and compact in the *back* and *loins*. The dog should stand firmly and lightly on his legs, and the *gait* in walking should be collected and easy. The *tail* should be thick, but not bushy; it should be carried in a line with the back, or only slightly raised at the point.

The *colour* most admired is "fallow," or light fawn, with a black muzzle. The brindle, though a sign of pure blood, is somehow not much esteemed by judges. I was lately shown, in the kennels of a well-known dog-fancier, a magnificent brindled Mastiff, which had remained unsold for two years, owing to this objection to the colour. The blue brindle, which is sometimes combined with light-blue eyes, called "china eyes," is, however, much valued. The other colours, in the order in which they are most admired, are—red, with black muzzle,

dark fawn, black, red and white, and fawn and white.

The Bull-dog.

There is no dog about which so many foolish exaggerations are current as the Bull-dog. Youatt expatiates upon his ferocity. "The Bull-dog," he says, "is scarcely capable of any education, and is fitted for nothing but ferocity and combat." This is utterly unfounded, and the Bull-dog is certainly a much-maligned animal; his former connexion with the brutal sports of the bear-garden has destroyed his reputation. Indeed, so little quarrelsome is this animal that he may be approached by strangers with far greater impunity than most other dogs, and is, as a general rule, more gentle and playful than any large dog I know of.

In regard to his not being capable of education, I may observe that I have myself trained a Bull-dog as a Retriever, and found him at least as teachable and as intelligent as most other Retrievers.

The nose of the Bull-dog is so fine, that instances have been known of their employment in tracking poachers, instead of bloodhounds; in doing which, not only a good nose, but great perseverance, tractability, and intelligence are required. Mr. St. John, in his 'Wild Sports of the Highlands,' mentions a Bull-dog used in tracking deer, whose performances in this way were the astonishment of all who witnessed them.

The courage and pertinacity of the Bull-dog are, however, admitted by every one. He is, without exception, the boldest animal in the whole world. The game-cock has been mentioned as equalling him in this respect, but it should be remembered that the game-cock will turn from any animal but one of its own species.

If anything would justify the accounts we read of this dog's terrible ferocity, it would be that he is so frequently kept chained up, than which nothing is more likely to spoil a dog's temper. Even this treatment, however, often fails to have its effect on the Bull-dog. I have repeatedly seen them, when their very limbs have been deformed by confinement, so gentle as to come out of their kennels to fawn upon the casual stranger.

Stonehenge, in his work on the Dog, remarks that the modern Bull-dog has undergone a change in his appearance during the last fifty years, and that he is a smaller and neater dog than was formerly the case. This is doubtless true of some modern strains, in breeding which, small size is particularly aimed at; but there are some breeders who pay attention only to the traditional points of the pure breed, disregarding small size, a thin coat, and a very thin tail. So general, indeed, are these requirements in the Bull-dog, that recourse has been had to the Terrier cross, to obtain a finer coat and smaller size. In proof of this I may mention, that it is well-known to London

fanciers, that a Bull-dog in London, lately celebrated as a stock dog, was the only short-faced dog in a litter—his dam having been a regular Bull-terrier.

This impurity in the blood of our Bull-dogs is of more consequence than may at first appear; for, if the pure breed is allowed to degenerate, we lose our chief means of infusing fresh strength and courage into other races. For instance, though the cross with the Bull-dog has wonderfully improved the Greyhound, we could by no means be certain that that breed would be bettered by crossing it with the Bull-dog strain, if that strain itself were crossed with the Terrier.

I was recently shown an extract from an old newspaper, describing the points of a Bull-dog belonging to a certain Mr. Shandos; which I shall quote, as I believe it to be a faithful description of the true breed of Bull-dogs, for which this island has always been famous:—

"On Tuesday sennight, at the Round House, Mr. Shandos' dog 'Ben' was shown against Major Dyce's dog 'Moses,' for the sum of 25 guineas, as agreed upon. Mr. Shandos' dog was pronounced the winner; but many gentlemen present in the pit declared that 'Moses' was the finer dog, and should have won the money. Nevertheless, four out of the five judges appointed to decide were in favour of Mr. Shandos having won the prize. Major Dyce then offered that his dog 'Moses' should fight

Mr. Shandos' dog for a second 25 guineas, and that the dog who first dragged the other outside a ring scored on the floor of the pit should be accounted to have beat the other. But Mr. Shandos objecting that his dog was young and unused to fighting, this wager did not come off. 'Ben' is a white dog, having a black patch over each eye, and a light spot of fallow on both eyebrows. He carries a low head and small ears. His coat is thick and close, but lies very smoothly, and has no black spots but on the head. His tail hangs low. His chest is very deep. His legs bowed out, and as thick nearly as a man's wrist. His head is heavy, the flews deep, and the forehead very broad. He stands 20 inches in height. Major Dyce's dog 'Moses' is a taller dog, of a white and brindled colour, having a saddle of the latter colour, as well as a patch on the left side of his head. He is in every way as handsome a dog, but that his back was pronounced too long."

To this description I can only add, that the *muzzle* should be very short, and the *lower jaw* projecting in such a way as to give the idea of being cut off square, at the same time that the *nose* and *upper jaw* turn up. The *back* should droop towards the insertion of the tail; the *tail*, instead of being very fine, should be rather short, but well covered with hair, and, if anything, rather thick where it joins the body. The prevailing *colour* of the Bull-dog should be white; some are

entirely brindled and a few quite black—but this is very rare.

The head of a white Bull-dog may with advantage have one or two patches of black, or brindle over the eyes.

The Bull-dog is faithful and vigilant, and these qualities, together with his formidable appearance, combine to make him the best watch dog in the world.

The evil reputation which has so long hung about this ancient and noble breed of dogs, should be no longer suffered to exist. Now that bull and bear baiting are happily things of the past, there can be no degrading associations about him, and it is high time that he should be held in the estimation which his good qualities deserve.

Fashions vary with pet dogs as much as with other things, and some thirty or forty years ago the Bull-dog was a fashionable pet not only of the gentlemen, but of the ladies too, of those days. Some of my older readers may have seen Lady Castlereagh driving in an open carriage in the Park, with a full-sized Bull-dog occupying the place in the carriage which is now usually held by a Scotch Terrier or a King Charles Spaniel. The late Dowager Lady Sandwich had a famous breed of Bull-dogs, two of which were always allowed to live in the drawing room at Hinchinbrook House. The picture of a stout Englishman with a Bull-dog between his feet is even now common on the

continent, and was no caricature of our countrymen of fifty years ago.

The Newfoundland.

Since the time of Lord Byron's famous dog "Neptune" the Newfoundland has become a very favourite companion dog in this country; and he is certainly well entitled to hold this position from his great intelligence and beauty.

The Newfoundland is of little or no use in the field, as he tires very soon, and is not remarkable for a good nose; but his faculty of learning to fetch and carry is very strong—many of these dogs taking to it from hereditary instinct. He is also an excellent water dog, swimming fast and strongly, and many anecdotes—some of them, doubtless, not very much exaggerated—are told of extraordinary escapes from drowning, by means of Newfoundlands.

There are two varieties of this animal—the Labrador, or larger Newfoundland, and the real Newfoundland, a much smaller dog.

The Labrador is a loosely made dog of great *height*, from 28 to 32 inches. The whole body is covered with thick, shaggy *hair*, which is very long round the neck; the *colours* are black, or black and white, liver colour, and dun. In the true breed, the *legs* are not feathered; their being so may be presumed to indicate a cross with the Setter.

The smaller Newfoundland has shorter and less

curly *hair*. His *body* is much more compact than that of the larger dog; and the best *colour* is black, though I am told that liver colour is not uncommon in their native country. His *legs* are shorter and often feathered; the *height* ought not to be over 24 inches.

There is a very graphic description of a Newfoundland dog in one of the works of Justice Haliburton, who is said to be a connoisseur in the breed, and I believe, himself possesses some very fine specimens. After calling attention to the dog's broad and intellectual-looking forehead, and his small and delicate mouse-like ears, he goes on thus:—"Look at the black roof of his mouth, and do you see the dew-claw? that is a great mark. Then feel that tail; that is his rudder to steer by when swimming. It's different from the tail of other dogs; the strength of that joint is surprising. But his chest! See how that is formed on purpose for diving. It is shaped internally like a seal's. And then, observe the spread of that webbed foot, and the power of those paddles. There are two kinds of the Newfoundland dog, the short and the long-haired, but I think those shaggy ones are the handsomest. They are very difficult to be got now of the pure breed; I sent to the Bay of Bulls for this one. To have them in health you must make them stay out of doors in all weather, and keep them cool; and above all, not feed them too high. Salt fish seems the best food for them, they are so fond of it."

With the exception of the web-feet, which no animal has, except the Ornithorhynchus, and the salt fish diet, which would quickly kill the hardiest dogs, nothing can be more accurately descriptive of a well-bred Newfoundland.

The Retriever.

This term is applied exclusively to the cross between the Newfoundland and the Setter or Water-spaniel, which has generally been employed for retrieving game.

The Retriever is bred, or should be bred, from the more compact, small variety of Newfoundland. He partakes of the forms of both, when bred from the Setter and Newfoundland, being less loosely made than the latter, and possessing the Setter's head and feathered legs. The *colour* is said to be always black, but Retrievers are nevertheless frequently seen of a pure liver colour.

The Retriever has an excellent nose and great intelligence, both of which he needs in the service he is put to.

I shall give directions for training the Retriever elsewhere.

The Dog of St. Bernard

Was, until very lately, almost an extinct breed. From bad luck or bad management, the stock in the Convent of St. Bernard was reduced to two or

three only, but the numbers are now said to be increased.

In appearance the St. Bernard dog resembles a moderate-sized Newfoundland; but his *tail* is bushy though not turned up, and his *hair* is thick and close, not curly as in the Newfoundland. The *colour* is a light fawn. I speak from recollection of the dog brought to this country by the late Mr. Albert Smith, the only specimen I ever saw.

The feats of these dogs in the Alpine snows, their sagacity, and their powers of endurance, have been too often described to need repetition.

CHAPTER IX.

HOUSE DOGS AND TOY DOGS.

The Poodle.

The Poodle has never been a great favourite in this country, in spite of his extraordinary intelligence and docility; the great objection to him being his fantastic appearance when his body is shaved, and his clumsy look when the hair is left on.

The Poodle does not take readily to hunting, though he possesses a capital nose; but in France he is often taught to point, and I have frequently seen a Bourgeois sportsman accompanied by his Poodle, which potters along the hedges in front of his master, and manages to find a great deal of game.

The temper of the Poodle is not particularly good, and I have not observed that he is either faithful or affectionate towards his master, in spite of statements to the contrary in all works upon the dog. The fact is, that these statements are chiefly founded upon French anecdotes of the fidelity and sagacity of dogs; and the inaccuracy of most popular French naturalists, from Buffon downwards, is well known. The Poodle is also the

commonest dog in France, with the exception of the Cur, and all the good stories are, of course, told of him alone.

I once became the purchaser of a Poodle, which was offered for sale by a poor student in a café on the Boulevards. The man only asked a napoleon for a dog, which, though by no means prepossessing in appearance, would put his paw upon any one out of a row of dominoes, stop a certain card when a pack was rapidly dealt out, and go through a variety of other amusing performances. I had not an opportunity of learning from his former owner the different signals and orders for his tricks, consequently I never could persuade him to choose a card, or domino, which tricks were, of course, accomplished by a slight previously taught signal given by his master: but so great were his intelligence and docility, that I easily taught him many new tricks. I suspect that the person from whom I bought him was not his first instructor, or that he did not exhibit all his tricks when I first saw him, for one day on going upstairs, I happened to say "monte," holding up my hand, and Scapin immediately walked upstairs on his hind legs. He had evidently been taught to retrieve—an accomplishment which he turned to the worst purposes, for he had a magpie propensity for stealing any loose article that came in his way, particularly what lay on the tables, and making hoards under drawers and in other inaccessible places, to which he re-

sorted to gnaw his stolen goods at his leisure. Though possessed of the highest talents, Scapin was of a very morose and sullen turn of mind. He seldom wagged his tail, or showed any signs of pleasure in his master's presence; he was also very ill-tempered, and this, combined with his reputation for sagacity, and the grave and dignified expression of his face, impressed everybody with a great respect for him; and my belief is, that the housemaid never ventured to interfere with his propensities for carrying off small articles of furniture.

His death was very sudden, and was wrapped in mystery till it was discovered that he had consumed nearly the whole of a large pincushion, including the bran, and probably several pins. I believe I was the only one of Scapin's numerous acquaintance, who in the least regretted his death.

The Poodle is too well-known to require a minute description. His *shape* should be compact, and should possess the general symmetry which marks a combination of activity with strength, and of which it is impossible to convey an exact idea in words. The points most looked to are: his *head*, which should be large, with a high, broad *forehead*, and a square *muzzle*; straight *legs*; and *hair* very thick, and falling in long, sharply twisted curls or ringlets. The *colour* is either pure white, or pure black, but generally a mixture of the two colours. The *height* should be between 15 and 18 inches.

THE BARBET

Is a smaller breed of poodle. In *colour* he is generally white.

THE PUG.

The Pug is often described in books as a Bull-dog in miniature. Nothing can be more erroneous, as will be seen from the following description:—

The *colour* is a bright fawn, with the nose, chaps and cheeks, called by fanciers the "mask," black. The *coat* should be short, thick and soft. The *head* alone bears some distant resemblance to that of a Bull-dog; it should be round, the *eyes* wide apart and round, but without the hollow between them which marks the well-bred Bull-dog. When closed by the hand, the eyes should be at right angles to the length of the face. The *chaps* should be broad, and the *nose* very short and flat to the face; the *mouth* should neither be underhung, nor should the nose turn up, as in the Bull-dog. The *ribs* should be round, the *chest* wide, and the dog should stand low on his legs. The *tail* should be twisted tightly over the hip, forming nearly a circle upon itself; the *legs* should be straight, and the *feet* long and well split up. The *ears* are invariably cropped as close to the head as possible, which causes the skin of the forehead to wrinkle—a point which is much admired. The *height* averages 12 inches; a good dog is seldom higher than 14 inches.

Pugs are neither graceful nor clever, and they belie any fancied resemblance to Bull-dogs, by being the greatest cowards among dogs. They are, however, tolerably affectionate. The rage for Pugs in this country was once very great, and there is now some prospect of its revival; the price of Pugs being at present very high. Two of these dogs were recently advertised for sale at 25 and 30 guineas apiece.

The Pomeranian Dog.

The Pomeranian dog, unlike the Pug, is a recent importation into this country, though he has been always well known in Germany.

This dog has a sharp *nose*; prick *ears*; a thick, straight, long and silky *coat*, either white, cream-colour, or black: rather full *eyes*; the *tail* bushy, and curled over the back; his *height* averages 14 inches. The Pomeranian is esteemed in proportion to his small size, the shortness of his legs, and the length, thickness, and silkiness of his coat.

The Pomeranian seems to be a very hardy and prolific breed, to judge from the numbers of really well-formed dogs of this breed that are to be met with. It is for this reason, probably, that a Pomeranian fetches no price in the dog-fancying market.

The Pomeranian is certainly a pretty and graceful dog, but he has the disadvantage of being neither clever, nor affectionate, and is, in addition,

possessed of a yapping restlessness that makes him quite insupportable to most people.

The Maltese Terrier.

There is not, in my opinion, a more beautiful or interesting pet than the Maltese Terrier. He is possessed of intelligence far beyond that of most other diminutive breeds, and his playful habits and quick, graceful movements make him peculiarly attractive. When he is in full health, and when his coat is what it should be, he is one mass of long, soft and silky hair. The only breed which can be compared to him for beauty is the King Charles Spaniel, which, if it is superior in possessing a glossy and richly coloured coat, and beautifully fringed legs and ears, has all the deformities of a prominent, watery eye, a protruding tongue, a broad, ugly mouth, and a generally apoplectic appearance.

The *colour* of the Maltese Terrier is white, with one or both ears occasionally cream-colour or light fawn. The general look is that of a very small Skye terrier, but the *coat* is a little more wavy and much softer, and the *tail*, instead of being carried straight, is curled stiffly over one hip, as in the Pug. The *ears* should not stand out from the head, as in the Skye terrier, but should be nearly concealed by the hair. The *hair* grows down in long tufts from the cheeks, which gives the dog its characteristic appearance.

The Maltese Terrier was a short time ago thought to be extinct, and good ones are still very rare. Most of the best specimens in this country are either imported from the Mediterranean, or are the descendants of recently imported dogs*.

The Lion Dog

Is a common pet on the continent, where he is often crossed with the Barbet. He is generally shaved to increase the fancied resemblance to the Lion, which the long wavy hair on his head, neck and shoulders gives him. It was probably in ignorance of this custom, that Youatt describes the hair on the rest of his body as being very short; the fact being that the whole body is covered with hair almost equally long with that on the forepart, like the Maltese terrier, which this little dog much resembles in colour, shape and size.

* A beautiful stuffed specimen may be seen, by those curious in the points of this breed, in the window of Mr. Buffon's shop in the Strand. As in most stuffed dogs, however, the face is a good deal distorted. I may observe that this will invariably take place in stuffed specimens, from the shrinking of the nose in the act of drying, unless that part is cut off, and replaced by a nose modelled after the original in properly coloured wax.

CHAPTER X.

DOG BREAKING.

EVERY one possessed of sufficient time, temper and patience, should break his own dogs. To say nothing of the dogs being in far better training than when the teaching of them is deputed to a servant, the interest of shooting is enhanced tenfold by witnessing the performances of our own pupils. The art is not a difficult one, and is based on common sense. Any ordinarily rational person may, by attending to the simple rules which I shall lay down, carry the training of his dogs to a far greater degree of perfection than can be secured except by giving the very highest prices to the professional breaker.

THE BREAKING OF THE POINTER AND SETTER.

The education of the Pointer or Setter should commence when he is about five, six, or seven months old, according to the precocity of the puppy, until which time nothing further should be required of him, than coming readily when he is called.

Before taking him into the field, where he is very likely to be disturbed by new sights and

sounds, he should be trained for about a month in the house, and taught to obey the several words of command, which will be given him in the field.

First let him be taught the meaning of "Toho;" to do which, take him into a room by himself. Remember that no lesson can be properly given where the dog's attention is distracted. Put on a collar, to which a check-string of a yard or two in length is attached: throw down small pieces of meat in different parts of the room, saying every time "Dead," which word will soon prepare him to expect to find something to his advantage. After he has eaten one or two pieces, check him suddenly by holding the cord as he comes to a piece of meat, at the same moment saying "Toho," and raising the right arm. In a few minutes let him take the meat, motioning towards it with the arm, and saying at the same time "Hold up." A few repetitions of this lesson will enable him to understand what is wanted of him, and he will soon learn to pause when only the right hand is held up; but the lesson must be continued till he is perfect in it. It should be an axiom in breaking, that a new lesson must never be begun till the dog thoroughly knows the former ones. The word "Toho," thus impressed upon the dog's mind, is afterwards used when he is in the presence of game, as a caution to him to point it.

"*Down charge*" is the order to crouch, and is an indispensable part of the education of every dog

used in shooting. Besides crouching at the word "Down charge," the dog must instantly do so at the sound of the gun. It must be taught as follows. Hold up the left hand, call out "down charge," and push the dog down upon the floor, keeping your hand upon him, until he will lie down well. Do not let him get up till he is whistled to. It is not always easy to obtain the dog's implicit obedience to this order without some severity; the utmost, however, that should be permitted is to crack a whip over his head, if he is very impatient. In a short time the dog will "down charge" when the breaker stands over him and holds up his hand; by degrees he will do the same at some distance, which must be gradually increased. Then the breaker should walk slowly away from the dog, keeping his eye upon him and being ready to rate him for the slightest movement. He should then stop and whistle, and when the dog comes he should be patted and made much of. This lesson may after a time be continued in the open air; and cannot be practised too often or at too long distances.

If the dog shows great reluctance to remain at the "down charge," and tries to crawl after the breaker, a long check-cord must be fastened on him, and he must then be taken into the field and made to "down charge." The end is to be tied to a peg driven firmly into the ground, allowing the cord to be quite slack. On moving quickly away,

the dog will follow, and be brought up with a jerk by the check-cord, while the breaker holds up his hand and says "down charge." A very few repetitions of this lesson are sufficient to cure the most impatient dog of any propensity to move after he has down charged.

Besides these lessons, the dog must frequently be practised in finding hidden pieces of bread or meat to which he is directed by the movement of the hand and arm. First throw down pieces in his sight, saying "dead," as in the first lesson. He will soon begin to watch the motion of the arm as a guide to the direction in which he is to look. After a time, drop a piece where he cannot see it, say "dead," and when he looks for it, guide him to it, by waving the arm towards it. He will soon look to you for signals when he cannot see the piece. Make him "down charge" after hiding a piece of meat between you and him, then whistle, say "dead," and direct him to it by beckoning. These are important lessons, and lay the foundation of a good range—the most important part in the education of either Pointer or Setter, and the point which is usually least attended to.

I have one observation to make as to these two lessons; namely, that a distinction should early be made between "Toho," or the caution to point, and the signal "down charge," which commands him to lie down. "Toho" should be said in a low, suppressed tone; "down charge" more loudly and

imperatively. At the risk of repeating myself, I must observe that no order should be spoken in a very loud voice, and the whistle should always be low, especially when the lessons are given in a room; for the dog, accustomed to have the orders dinned into his ears, will pay no attention to them when they are softened by distance in the field.

It is requisite that the dog should instantly "down charge" on hearing the report of a gun; this can be taught by causing an assistant to fire off a pistol at some distance, when the breaker should stand by the puppy to push him down as before, holding up his hand, &c. The pistol should gradually be fired off closer to the dog. By this means the "down charge" to the gun is perfectly taught, and there is no danger of the most timid dog becoming "shy of the gun."

The command "Ware" (pronounced *war*) is given when the animal is to avoid anything, or desist from what he is doing—as, when he chases sheep, he is told to "Ware chase;" when he wishes to go through a gate, or a gap in a fence before his master, he is told to "Ware gate," or "Ware fence."

This can easily be taught in the room, with a check-string. The door being left open, the breaker must stand still in the middle of the room, and when the dog tries to go out—which he probably will, sooner or later—the breaker must tread on the cord, which the dog trails after him, so as to jerk

his collar, at the same time saying "Ware gate." A few lessons will make the dog understand what is wanted of him, and the lesson must be gone over when he is in the field.

The dog should be taught to come to heel, and follow without any attempt to leave the heels of his master. I have found it the easiest way of teaching this lesson, to walk out with the dog in a lane, or narrow road. The dog should first be made to follow; any attempt to roam being repressed by a very slight tap from a stick carried in the hand, a backward movement of the hand, and the word "Heel." After a time he may be encouraged to leave the breaker by the words "Hold up;" and presently he must be brought back again by the signal, "heel," and the backward wave of the hand, and finally he must come to heel at once, when only the hand is moved.

When these lessons are perfect, further instructions may be given the dog, in company with another, either an old, trained dog, or a young one, whose education has proceeded as far as his own. The object of doing this, is to check that natural jealousy which all young dogs feel for each other. All the former lessons may be repeated; the dogs may be made to "Toho," and one alone allowed to take the lead, or both made to "down charge," and only one allowed to get up at a time. In this way is obviated much of that rivalry which is afterwards often so troublesome in the field.

It is now that the "Range," the most important point in the dog's education, must be taught him. I presume that he is thoroughly initiated in the "down charge," and that he comes readily when whistled to. When he is about eight or ten months old, he should be taken out alone into a large field; and the word "hold up" being given, he will generally range out at once. If not, he must be taken out with an older dog, whose example will teach him to do so. When he has got about 100 yards either to the right or left of the breaker, he should use the whistle (the same to which the dog has always been accustomed), and the instant the dog turns to him, he should turn his back and walk in an opposite direction, motioning the dog by waving the hand across the body in the direction in which he is to hunt. Some perseverance and patience are necessary, but by degrees the dog will range steadily from right to left in front of his breaker. This is a great point gained, and after this, everything else—pointing, or setting and backing—comes easily.

Another way of teaching the range may be practised with a very wild dog, who is inattentive to the whistle. Fasten a very light check-cord, 50 yards in length, to his collar, and let him range with it on; when he gets to the end of the beat, a slight whistle and a wave of the hand will turn him in the other direction.

The dog, without having as yet seen game, now

understands the signal "Toho," down charges at a sign, a word, or the discharge of a gun, hunts in the direction in which the hand is moved, comes to "heel" at a word or sign, and finally has a good range. He has now only to be taken into the field and taught to set and back, to quarter the ground with other dogs, and to be broken of any faults he may contract.

The young dog, being brought into a field where there is game, will in most cases point of his own accord—pointing being hereditary in both Pointers and Setters. When he is seen to "feather," or show symptoms of scenting game, a cautionary "Toho" may be called out, and the right arm raised, to prevent his running in; and the breaker should walk up to him, say "Toho" in a low, gentle tone, pat him, stay by his side for a few minutes, and then allow him to draw on and put up the birds; the breaker walking all the time by his side. Then the signal "down charge" should be given, which, if the dog has been taught as I have recommended, he will instantly obey. After being allowed to find and point one or two birds, a bird may be shot over him: he should be allowed to smell, but not to mouth it. This will clinch all his previous instructions, and he will now take the deepest delight in hunting for his breaker.

Sometimes, however, the young dog ranges well and finds birds, but refuses to point or set, running into his birds and putting them up. To cure this,

he must be taken out with an old steady dog, when the birds are lying close. As soon as the old dog finds, the other will run up to him: as soon as he gets near, stop him with the "Toho," which will give him an inkling that something is expected of him. Then walk up and allow him to draw on to where the birds are; keep your hand on him as he inhales the scent, saying "Toho" in a low, impressive tone, and he will at once point. Keep him a long time at the point, speaking to him all the time. Then walk forward, and put up the birds as before.

A very headstrong dog may require the use of the check-cord, not to make him point, but to prevent his rush at the birds when they rise. The cord should be fastened to a spike while the dog points, in such a way that when the breaker puts up the covey, the dog may be violently jerked back as he pursues them.

These directions do not apply to all dogs; a shy, timid dog, who has been used with any degree of severity, often refuses to range freely, and runs at every moment to the breaker's heels. Such a dog must have great allowances made for him; he must be permitted to chase larks—even to put up birds; and his education not taken seriously in hand till he shows delight in hunting something. On the other hand, a bold, wild dog must be held in check from the first, and indulged in no such vagaries.

In making a point, it is of great consequence that

the dog should stand steadily the instant he becomes aware of the presence of game. Many dogs, after scenting game, crawl on until they are within a few yards of it, when they will point steadily enough, if the birds happen to lie well; but in the majority of cases, the birds are either sprung too soon by the near approach of the dog, or run forward and get up out of shot. If a young dog acts in this way, he must be dragged back to the exact spot where he ought to have pointed: do not use the whip, but stand over him and say "Toho;" stay by him in this way, if the birds have not moved, for at least five minutes. Then make him draw on to them, and when they rise, shoot the bird he is pointing, being ready to bring him to the "down charge" the moment the gun is fired.

I am opposed to Setters and Pointers being taught to retrieve, for reasons mentioned elsewhere; but it is essential that they should be taught to "point dead," an accomplishment which is often neglected, and by no means comes naturally to either breed. Indeed, the attempt to make a dog assist in the search for a wounded or dead bird, generally leads to his rushing in, and mouthing and mangling it; when, of course, the shooter runs forward to the rescue, and a scramble ensues, which may materially injure the dog's training.

When the bird which I suppose the trainer to have shot, has fallen, and the dog "down charged," let him be called, and then by the word "dead,"

encouraged to look for it, as he was encouraged by the same word to look for the piece of bread in the initiatory lesson. The dog should have the wind of the bird—in other words, he should be placed where the wind is blowing *from* the bird. When he succeeds, as will be easily seen by his feathering, be ready to call out "Toho," and crack the whip if he is too eager. Then, keeping the hand up, walk round, so as to get the bird between you and the dog, pick up the bird, call the dog, and let him smell it well, patting and making much of him, but preventing him from mouthing it. I have seen some keepers, on these occasions, take a piece of boiled liver out of their pockets to reward the dog when the first bird is killed, but the sport itself is sufficient reward, and this unsavoury custom need not be adopted.

A very few repetitions of this simple lesson will make the dog take a delight in "pointing dead." Besides saving the sportsman an infinity of time and trouble in looking himself for lost birds in turnips or clover, the habit of "pointing dead" will often increase his bag by one or two brace of what would otherwise have been lost birds.

The dog is now ready to be used in shooting by himself, but if hunted with another dog, he must learn to "back," which should be taught by taking him out with an older dog, whose stanchness can be depended upon, and stopping the young one by the signal "Toho" when the old one points. A

check-cord will seldom be necessary. If possible, get in front of the young dog, pat him and encourage him, and give him plenty of time to see the other pointing. Then walk up to the birds, taking great care that your pupil does not stir. Many dogs "back" naturally, and most of them require little instruction to make them imitate their companion's point; for it is to be remembered that the dog is instantly to back, whether he can scent the game or no.

I may here make a few remarks upon the proper "quartering" of the ground by two or more dogs. I have explained that the dog, when ranging singly, is to cross the field, or moor, first to the right and then to the left before his master, always turning up the field for a few yards at the end of his beat each way, in the direction in which his master is walking.

When a young dog is taken into the field with an old one, he is strongly inclined to follow him in his beat; this must be prevented by first sending the old dog to the right, and the young dog to the left. They will then cross each other somewhere about the middle of the field, and continue their respective ranges. This constitutes "quartering." If the young dog still wishes to follow the other, they must both be called to heel, and the young one tried by himself for a time, and the experiment then recommenced.

It is very difficult to make three dogs quarter

the ground by crossing each other in front of the shooter. It is far better, if shooting on a moor where there is little game, to make each take a separate range without crossing each other—one being to the right, one to the left, and one in front; always taking care that there is a proper distance between the dogs in each brace. This can only be managed by the whistle and hand; if a dog is working too near his companion, call to him, and when he turns, signal to him to keep away or come nearer.

It is almost needless to say, that as the scent of birds comes to the dogs on the wind, the field or moor in which the dogs are to hunt should be entered on the side from which the wind is blowing. This is called giving dogs the wind.

The dog trained on the principles I have laid down, will, I am convinced, neither "shy the gun" nor "blink." Such faults are produced by undue severity in training, and I am persuaded that no dog need be beaten more than once in the course of his education. One beating may, indeed, be necessary to ensure obedience; a dog which requires more, is seldom worth the trouble of training. Many dogs cannot be taught a good range; they potter along hedgerows, looking for rabbits, &c. This is usually the result of early habits of self-hunting, and of neglect in enforcing a systematic range. A potterer is generally incurable and worthless.

"Chasing fur," and running in to dead game, if persisted in, can only be cured by the use of a check-cord, 30 or 40 yards in length, with a spiked collar if necessary, which must be held by an assistant when the point is made.

Many dogs are never required to point hares or rabbits; hares, however, may be pointed without any injury to a dog; but he should be rated for taking the slightest notice of rabbits, which are enough to make a potterer of the best ranging dog in the world. Even if a dog is required to point hares, I should recommend their not being shot over him the first year. He can always be made to point them when he is steady at feather; for the scent of a hare is stronger, and seemingly more attractive to all dogs, than that of winged game. Let the first few hares shot to the dog, be killed on their forms. This proceeding may be unsportsmanlike, but I know nothing so likely to conduce to his steadiness. The dog seems often to understand that there is more chance of getting the hare by the gun, than by his pursuing it.

If a hare unfortunately starts up close to the dog, and he rushes off madly in pursuit, forgetting all his obedience, and in spite of all your cries of "Ware chase" and cracks of the whip, there is nothing for it but patience. Stand perfectly still, and when he discovers how useless the chase is, he will come slinking back. Make him down charge at once; then drag him back to the haunt, or form, of

the hare, rate him soundly, saying "Ware chase" and cracking the whip over him, after giving him one or two sharp cuts with it.

While shooting with a young dog, or indeed with any dog, it is absolutely necessary to carry a small dog-whip in the pocket. The very fact of always seeing it, creates a salutary awe in the dog, which will itself keep him in order.

A pointer or setter sometimes takes to chasing and even killing sheep; if this is not checked at once, it is apt to become an incurable habit. One method of doing so, is to lead a dog given to worrying sheep through a yard or fold full of them. The whip may be occasionally cracked if he turns towards them, and now and then laid across his back rather sharply; at the same time the person leading should say "Ware sheep." The probability is, that when he comes across sheep in hunting, the warning order "Ware sheep," and the crack of the whip, will remind him of the unpleasant associations connected with his walk in the sheep-fold; but in some cases this method fails, to my certain knowledge.

Yet before the owner makes up his mind to hang the dog, which he should do if he cannot cure him, he might try another cure; namely, fastening him to the end of a strong pole, to the other end of which a powerful ram has been tied.

Another method is to fasten round his lower jaw, above the tushes, a narrow strip of sheep's

skin with the wool on; this must be left on several hours a day. I have never tried this plan, nor seen any one who has.

In conclusion, it must be repeated that in dog-breaking nothing can be done without great patience; that all undue severity must be avoided; that consistency in always using the same signals and words must be observed; and finally, that the rules which I have laid down must be applied with some latitude, according to the disposition of the dog; relaxing them where the dog is timid, and increasing their severity where he is bold and headstrong.

That dogs broken in the careful manner I have recommended take a long time to teach, I do not deny, nor that their first performances in the field may not be quite so striking at first sight as those of the batch of young dogs which the professed breaker shows off. But the gentleman who trains his own dog, or brace of dogs, always has this advantage over the professional, that he is able to break in his dogs singly, while the breaker is compelled to train them together. When the latter exhibits his dogs for sale, he usually has one or two old dogs in his team, which find the birds for the young ones, while these do nothing but imitate, and being only taught to back and "down charge" thoroughly, appear to have the very highest training.

In making a purchase of broken dogs, it is absolutely necessary to see them hunt separately to

judge of their two most important points; namely, whether they have good noses, and whether their range is good. To buy really well-trained dogs in London, a price must be given varying from £20 to £50 a brace. I do not talk of the fancy prices occasionally given for very remarkable performers.

I should, however, recommend any one in search of a brace of Pointers or Setters, to buy them as unbroken and untried puppies, when he can obtain them for very little. He will, of course, pay particular attention to the points, as described under the head "Pointers," and, if possible, he should obtain such as come from a well-known good stock. Such a brace of dogs with good training, are far more likely to turn out well, than a brace of so-called broken dogs, bought at five times the price from a dealer.

The Breaking of the Retriever.

If the breaking of the Pointer or Setter is better undertaken by the master than the keeper, it is still more desirable that the Retriever's education should be entirely managed by the person who is eventually to use him.

A good Retriever, who will come to heel the moment he is signalled to, or whistled to if out of sight,—who will "road," or follow the foot scent of game well,—who is soft-mouthed, and who will on occasion hunt close to his master—is, as every

sportsman will allow, the most useful dog he can have. Such a dog, it is needless to say, will procure his master many extra shots, and secure him many dead or wounded birds that would otherwise be lost.

It is now the custom for gentlemen to take their own retrievers when invited to shoot at country houses; unless, however, the dog is perfectly broken, he is of more trouble than use, and by running back after missed hares, and forward after running pheasants, and getting into mischief generally, will procure his master more maledictions than extra shots.

The Retriever can scarcely be taken into hand too early. The young puppy of five or six months old, can be taught to "fetch" by shaking a glove for him, and encouraging him to drag at it; it can then be thrown, and if the dog brings it, which he will do in nine cases out of ten, to have it played with, he must receive a small piece of bread or biscuit. He soon understands the nature of the bribe, and in a short time brings the glove readily. Except to say "seek," or some such word, when the glove is thrown, never speak to the dog while he is bringing it: it induces him to loiter. If he does play with it and loiter in bringing it, walk away and he will hurry after you.

It will be advisable, after a time, to drop the article you wish him to bring (anything soft, such as an india-rubber ball, is better than a stone,

which makes the mouth hard) at some distance from you; then by using the word "seek," he will be induced to fetch it to you. After a time, let him bring a recently killed rabbit; and if he shows the slightest disposition to tear it, pass a few knitting needles through it, which will cure him without hurting his mouth. Before practising with a dead rabbit, it is a good plan to use a stuffed rabbit-skin, which is lighter.

During all the time he has had these lessons, he must be accustomed to find small pieces of meat thrown in different parts of the room; to which his attention is to be directed by a movement of the hand and arm, and the word "dead." These pieces may sometimes be hidden under the rug, &c.

When he is accustomed to this, and understands the word "seek" as an intimation that he must look for something, he must be taught to "road," by letting him find a piece of meat which has been dragged through grass for a yard or two, unperceived by him. This lesson cannot be practised too frequently.

When he has often brought the dead rabbit as recommended above, let him "road" a live one in high grass, whose hind legs have been tied together with tape; taking care that he does not injure the animal when he retrieves it.

When he is perfect in these lessons, and comes readily to heel at a signal or whistle, which must be taught in the way recommended at page 82,

and is accustomed to the report of the gun, he may be taken out with the gun, and his education finished by making him retrieve wounded birds; and it is astonishing how well he will work at once, if the preliminary lessons have been conducted as they should be; that is, step by step, and without ever teaching a new lesson till the preceding ones are thoroughly mastered.

The Retriever's education is now complete, unless he is wanted to hunt as well—in which case he must be taught the "down charge," as described at page 79. To make him hunt close to his master, the plan adopted in breaking Spaniels must be adopted.

Many persons teach their Pointers and Setters to retrieve, and the plan has its advantages; but I object to it on the grounds that a dog with a high range can seldom be induced to "road" a wounded bird, and that "roading," when much practised by Pointer or Setter, is apt to give the incurable habit of pottering.

As regards the kind of dog to be used as a retriever, Stonehenge and other authorities are of opinion that the cross between the Newfoundland and Setter, or Water Spaniel, is unnecessarily large: I have heard of a cross between the Terrier and Beagle being used for this purpose. Almost any dog with the requisite qualifications of strength to carry a hare, a good nose, and sufficient intelligence, may be taught to retrieve. I am myself possessed of a

first-rate Retriever of that maligned race, the Bull-dog. It is, I believe, not generally known, that the Bull-dog possesses a nose inferior only to that of the Bloodhound.

The Breaking of the Water-Spaniel

Demands more care, time and patience than that of any other breed used in sporting. The requirements in a good Water-spaniel are that he should hunt well to the hand, that he should fetch and carry, that he should "down charge" at a sign, and remain without moving for half an hour at a time, if necessary, in the position into which he has dropped; and he must follow perfectly at heel. Besides this, he must always be ready to plunge into the water in the coldest weather. The education of the Water-spaniel must be so perfect, that he will obey every order that is given him, without the necessity of raising the voice; and, as this high degree of training has to be given to a dog, which, though exceedingly intelligent, is very high-spirited by nature, it is not surprising that a well-broken Water-spaniel should be so scarce and valuable a dog.

The Water-spaniel, when his previous education in fetching and carrying, in coming to heel, and in obeying the "down charge" is completed—and the directions given on these points, when treating of the Pointer and Setter, will equally apply to this

dog—should be accustomed to enter the water in warm weather, by throwing pieces of meat or bread into still, shallow water, and encouraging him to go in. He may soon be used in duck, or rather flapper-shooting in July or August.

The Breaking of Spaniels.

The great object in the training of Spaniels, is to accustom them to hunt within a radius of twenty yards or so of the shooter, without the necessity of continually holloaing and whistling to them.

The quickest way of breaking a team of Spaniels is to have an assistant to "whip in" the refractory dogs which hunt too far from the breaker, while the latter should whistle or call to them at the same time. They can also be taught by the use of the check-cord; when a Spaniel hunts too far off, he is made to "down charge," and the breaker walks up and drags the dog towards him by it. If a dog is too wild, he may have his fore-paw put through his collar, and be hunted in this way for half an hour or so.

Spaniels should not be hunted in thick covers till they have shown themselves obedient in hunting hedge rows, bits of gorse, &c., where they can be seen, and rated by name, for any short-comings. They should not, however, be hunted at all until they are perfect in the "down charge" and in coming to heel; both of which should be taught in the manner recommended for the Pointer or Setter.

Training of the Bloodhound.

The Bloodhound is by nature endowed with a nose of extraordinary scenting power; but it requires a special training to induce him to follow the scent of a man.

When quite a pup, he should be taught to "road" a piece of meat in high grass, in the manner previously described. After a time, an old boot or shoe, well rubbed with meat, may be used instead of the meat alone, and the distance he is made to follow it increased. The dog must always find something to reward him for his labour. When he is well practised in this lesson, let him be taught to follow the scent of a man, the soles of whose boots have been rubbed with meat. When the dog comes up, he should invariably be well rewarded. Of course the man must not be in sight when the dog is laid on. The meat rubbed on the man's boot should be gradually lessened in quantity, and the interval between his starting and the laying on of the dog increased in length.

If these lessons are persevered in, the Bloodhound will in time follow upon the man's tracks after an interval of an hour or more, with no danger of being thrown out by the most puzzling cross scents.

The Teaching of Tricks, Good Habits, &c.

The general remarks I have made at p. 77 apply equally to teaching any kind of tricks. With great patience and perfect consistency, any dog may be taught to do wonders.

All dogs are required to learn habits of cleanliness in the house, which may be taught easily in a week, by only employing constant watchfulness while the dog is in the room, and when he misbehaves, instantly rating him, seizing hold of him, and turning him out of doors for a few moments. He soon learns what is wanted of him, whereas beating him for such offences utterly bewilders and confuses him.

Dogs taken out in large towns are frequently taught to come to heel, with a view of preventing their being stolen; but the reader who will refer to my description of the tactics of dog-stealers will perceive the inutility of this practice.

It would, however, be very easy, by first giving the dog some notion of hunting by hand, or rather of going in the direction in which the hand is moved (see p. 80), to teach him to keep always in front of his master. By invariably stopping when the dog lags behind, and motioning him forward with the hand, using at the same time some such word as "run on" or "forward," always of course using the same word, the dog would acquire the habit of keeping in front, and would never be out

of his master's sight; and the dog-stealers would in consequence be completely baffled.

Many amusing, and seemingly very difficult tricks may be taught by taking advantage of some peculiar habit of the dog's and working it, as it were, into a trick. A dog who is in the habit of standing up on his hind legs when food is held above him, may be taught to dance, by gradually increasing the length of time before he is rewarded.

A dog belonging to a friend of mine, which, when a puppy, had acquired a habit of playing with the end of the bell-rope, was easily taught to ring the bell by giving him a piece of bread for pulling it when it was shaken at him, at the same time that the word "ring" was called out; but in teaching this trick, care must be taken to make the bell-rope quite secure; for if the dog pulls it down upon him, he will assuredly never again approach it.

After teaching one or two tricks, others come easily. The dog has learnt that something is to be taught, and he takes pains to discover what it is.

Among the really useful tricks which a dog can easily learn, may be mentioned ringing the bell, shutting the door, and fetching and carrying. I have seen a Newfoundland "fielding" in a game of cricket—rushing after the ball the instant it was struck, and delivering it safely into the hands of the bowler himself. This dog, a fine, black New-

foundland, whom I watched with some interest, stood at what is called "cover point," and so far from flinching from the balls, he several times, while I was looking, stopped some rather fast ones which came in his direction. I also noticed that he invariably delivered the balls into the hands of the bowler; though, as it was a double game, this was, of course, a different person every "over." I mention this circumstance to show what may be done by training.

Among other tricks, a dog can easily be taught to give a paw, to jump over a stick, and to beg.

If any fuller information is required on the subject of breaking the dog, I can safely refer the reader to Colonel Hutchinson's excellent little work on "Dog Breaking."

The Entering of the Greyhound.

The Greyhound should not be entered until he is at least twelve months old. Some dogs have not arrived at their proper size and strength even then, and none are ready before that age.

Greyhounds should early be accustomed to being led, otherwise their struggles in the collar will materially interfere with their running, and in public coursing might lose them the stake.

When the young dog has seen one or two hares killed and will lead quietly, he may be put in the slips with a companion; and after he has run four

or five courses and killed one hare, or even assisted at the killing of one, he may be considered entered, and if a public Greyhound, is ready to run for a stake.

The Entering of Fox-hounds, Harriers and Beagles.

Fox-hound puppies may be entered when they have got through the distemper, which dogs kept together in any numbers seldom escape, and when they have been "rounded"—an operation which is better performed before the hounds have come in from walk, if this system is adopted.

They had better be kept for some weeks in kennel, to allow their natural shyness to wear off, and to familiarize them with the discipline of feeding, coming readily when called, &c. They may then be taken out (a few at a time) in couples, and walked among deer or sheep until they come to disregard the temptation of pursuing them. The young hounds should frequently be taken out of the kennel for exercise, and should go at least four or five miles a day.

To break them from hare and rabbit, they may be made to draw small coverts where ground game abounds. Those with little underwood are the best, where they can be best kept in view, and any attempt at riot instantly checked.

Cub hunting can scarcely be begun too early,

and is perhaps the best opportunity of breaking young hounds from riot. In cub hunting it is advisable to have in the pack at least an equal proportion of old seasoned hounds, whose example will do more to steady the young hounds than all the holloaing and whip-cracking in the world. Indeed holloaing at a young hound who is running riot is generally disregarded by the culprit himself, whose attention is entirely taken up with his game; and the reprimand is applied to themselves by the other hounds, who are doing nothing wrong, and who are thereby likely to be discouraged and disconcerted. It is much better for the whipper-in, under these circumstances, to wait till he can catch the real offender *flagrante delicto*, and give him one or two stinging cuts with his whip.

Young hounds who have tasted blood a few times, who are rationally and patiently treated for riot, and who are under good discipline before they are allowed to draw at all, become steady in a very short time.

These remarks apply to Fox-hounds; but the entering of Harriers and Beagles, and the breaking them from hunting anything but their proper game, are managed on similar principles.

CHAPTER XI.

GENERAL MANAGEMENT.

FEEDING.

UPON the feeding of the dog depend (more than upon anything else) his health, his spirits, and his appearance. The general rules to be observed are regularity in times of feeding, moderation in the quantity of food, and variety in the description of it.

There is some difference of opinion as to whether a dog should be fed once or twice a day. It is argued that the health of any animal must suffer from its being allowed to go without food for so long a time as twenty-four hours; on the other hand, many dogs, especially sporting dogs, are kept in perfect health and spirits with but one meal in the day. It should be remembered that no conclusion can be arrived at in this matter by a comparison with graminivorous animals. The horse requires to be fed at least four times a day, and the cow and sheep feed continuously throughout the day, and for a great portion of the night; while carnivorous animals, whose food depends greatly upon accident, are provided by nature with powers of resisting hunger for long periods, and of being

able to provide for the wants of a whole day by a meal which lasts only for a few moments. Again, in some animals of prey, the long fasts which they undergo in a state of nature, must be imitated when they are in captivity, to preserve them in health. This is the case with hawks when in confinement, which, to be in perfect health and spirits, require to be kept without food for thirty-six or even forty-eight hours at a time, at least once a week.

Theory therefore, as well as practice, is in favour of feeding the dog only once in the twenty-four hours; but I recommend it only in the case of strong, full-grown dogs. Sickly or weakly dogs, and delicate toy-dogs, require more frequent meals.

The London dog-fanciers, who principally deal in small Spaniels, toy Terriers, and Italian Greyhounds, I believe invariably feed their dogs in the morning and evening.

In any case, no dog should have scraps of food given to him during the day. This system, if persevered in, as it generally is in petted dogs, especially if they belong to ladies, is sure to destroy the digestion and bring on a long train of diseases.

The quantity of food will of course depend on the size of the dog. A good general rule to observe is to give about an ounce of food for every pound in the dog's weight; so that if a dog weighs 16 lbs., he should have about 1 lb. of food every day. But if a healthy dog, taking proper exercise, is observed to become too fat or too thin, his food

should of course be slightly diminished or increased in quantity. I mention the dog's health, as necessary to be considered in such a case, as a pampered dog often becomes excessively fat, and will, in this state, refuse to eat more than a few ounces daily. In any case, the dog should never continue to be fed till he ceases to be hungry; for a healthy dog, if allowed, would eat nearly a quarter of his own weight in food.

It is difficult to state any fixed amount of food as the right quantity for every dog. As it is most important that the dog should not overload himself with food, I shall give a very simple rule as to the quantity to be given. When the dog is fed for the first time, place a full meal before him, and watch him; the moment he walks round the plate to pick his food, looks up, or makes any sign of not being so eager as when he began, stop him, and let the quantity he has then eaten—always supposing the dog to be in his usual health—be the guide to what he is to have daily.

It is an excellent plan always to watch a dog feeding, letting him occasionally have more or less according as his appetite is good or bad. A loss of appetite is always the earliest symptom of disease.

While upon the subject of feeding, I must caution my readers against giving dogs salt as a promoter of digestion. Salt has a very bad effect upon all flesh-eating animals, and upon dogs in

particular. Captain McClintock, in his "Narrative of the Voyage of the 'Fox' in the Arctic Regions," mentions that a full meal of salted provision will kill an Esquimaux dog—the hardiest breed of dogs, perhaps, in the world. Yet I am acquainted with a lady who persists in sprinkling the food of her lap-dog with salt for the good of his digestion!

The best kind of meat for every description of dog is mutton; but, as it is too dear to feed any large number of dogs upon, horseflesh is generally substituted for it, and they are found to thrive well upon it. The principal food of dogs, however, should be meal, and, of the different sorts, oatmeal is unquestionably the best; wheat-meal being too expensive, barley-meal too heating, and Indian meal not palatable and troublesome to cook. It is sometimes, however, advisable, from its cheapness, to feed dogs with Indian meal, in which case it should be boiled slowly for an hour or more.

In large kennels it is usual to boil the meat till it is quite soft; then to remove it and stir in oatmeal, and let that simmer for a quarter or half an hour; after which it is allowed to cool in flat vessels. The meat, being then removed from the bones, is mixed with the porridge, or, as it is called, "puddings;" the bones themselves should be given separately.

Such a method of feeding, as by far the most economical, should be adopted where more than

three or four large dogs are kept; the bones and scraps of meat not used in the house being slowly boiled in a large pot, and oatmeal mixed into the broth. By this means all the nourishment is extracted from the bones and the oatmeal relished by the dogs, whereas if simply boiled and given separately, it is often rejected. The broth should be boiled every day in hot weather; every other or every third day in winter. Where enough meat cannot be got, greaves make a cheap and tolerable substitute; they should be first softened by boiling, and then mixed with the oatmeal "puddings."

Small house dogs may be fed almost entirely upon biscuits, or dry crusts of bread soaked in gravy or milk, which should in either case be poured boiling over the biscuits and then allowed to cool. Dogs so fed should have a bone or two given them daily, taking care that the bones are not so small as to be likely to be swallowed.

Paunch and tripe, besides being a very cheap, are an excellent food for dogs; and that they will thrive upon them alone, is proved by the fact that a well-known dog-fancier who resides at Kensal New Town, feeds his larger dogs on nothing else. The smaller kinds, the Spaniels, Terriers and toy-dogs, he feeds on biscuit.

Every dog should have, twice a week, fresh vegetables boiled in the broth which is given him: the neglect of this is apt to bring on a train of symptoms similar to those produced in the human

subject by a deficiency of vegetable food; namely, heaviness, debility, aversion to exercise, and finally, instead of the well-marked symptoms of scurvy in man, the dog is attacked by mange in some form or another. Dogs should therefore have a due admixture of fresh vegetables, among which potatoes, which contain the peculiar vegetable acid required, are the best. It is probably to supply a deficiency of this acid that the dog is so often seen to eat grass.

Besides having an antiscorbutic effect, the occasional use of vegetables obviates constipation, to which the dog is very liable. To effect this last purpose, boiled liver may also be given. When only occasionally given, it is a useful laxative, but has no effect if continually used.

Exercise.

Every dog requires exercise in the open air for at least an hour every day; and no one, who from any circumstance is unable to give this amount of exercise to his dogs, should commit the cruelty of keeping them. A great part of the ill effects of overfeeding is counteracted by plenty of exercise, but the two causes usually combine to bring the lap-dogs of most ladies into the miserable condition in which they are often seen.

As a dog gets old, he is often less inclined for exercise; but even then, if in good condition, he

will enjoy a run out of doors, and he should always have it, until he is quite worn out by old age.

Lodging and Kennels.

Very delicate dogs require a warm place to sleep in when they live in the house; but a piece of thick carpeting upon the floor is the best bed for most house dogs. To make a dog's bed too warm and soft, serves to make him lazy and averse to taking exercise. This is one cause of the pampered condition of many dogs, and is quite unnecessary, for a dog can always enjoy perfect rest and sleep on the floor. No dog, however, should be allowed to sleep upon bare stones, which is exceedingly apt to cause rheumatism.

The *box-kennels* used in the open air for watch-dogs, &c., should be placed in dry and sheltered situations, and the dog should be allowed plenty of dry straw. He should also have a sufficient length of chain, to prevent his getting cramped by want of exercise. The kennel should be placed upon stone pavement, otherwise it is difficult to keep the place as clean as is necessary.

Kennels for Sporting Dogs.

Where only a few dogs are kept, a kennel can be built for them at a small expense, or a spare out-building can be easily converted into one. All that is absolutely necessary, is a covered place for

them to sleep and lie in, connected with a small paved yard, surrounded by a wall or high paling. The sleeping place should be furnished with benches about 2 feet from the ground; these benches are usually made of oak or deal boards, cut into widths of 3 inches, and nailed half an inch apart. In front of the bench there should be fixed a piece of board about 4 inches high, to keep the straw from falling off. The door of the lodging room should have a hole cut in the bottom, sufficiently large for a single dog to pass out into the yard.

Great attention must be paid to the dryness of the kennel. Dogs can withstand great severity of cold in dry lodgings, but *damp* is the main source of mange and kennel lameness. A drain should therefore be carried all round the kennel, and the earth taken up from the floor to the depth of about 2 feet, and broken stones, gravel, or cinders placed in its stead. Upon this glazed tiles or cement should be laid,—the latter being far the best,—and thus thorough dryness is ensured.

Fox-hound Kennels.

The kennels of Fox-hounds should be built upon the same plan as the kennels I have described above, but are necessarily on a larger scale, besides requiring a boiling house, feeding court, paddock for occasional exercise, straw house, and separate lodgings for sick dogs and bitches.

In the remarks which follow, I am mainly indebted to Scrutator, the author of 'Horses and Hounds,' who has written with more judgment and experience upon the subject of fox hunting than any author since the days of Beckford.

The fox-hound kennel should be placed in a high and dry situation; the building should face the south. The lodging rooms should be four in number, by which means a dry room is secured for the hounds to go into every morning in the hunting season, when the pack—which we will suppose to consist of about forty couples—is divided into two parts.

Over the lodging rooms, Scrutator recommends having the sleeping apartment for the feeder; this is not, perhaps, material, but it is desirable that he should be as close to his hounds as possible.

The boiling house, feeding court, straw house, and separate lodgings for sick dogs and bitches, should be in the rear of the lodging rooms, and in front a paddock, surrounded by high walls or palings.

Two boilers are required, one for meal and one for flesh. If possible, let a constant supply of water be conducted into the kennel by means of earthen pipes; if not, a well must be sunk close to the kennels.

The remarks I have made above as to drainage, and the necessity of dry kennels, will apply still

more strongly to fox-hound kennels, than to those for sporting dogs.

To each lodging room there should be two doors, one being at the back, with a small sliding panel, through which the huntsman may observe the hounds; and another door in front, with an opening cut at the bottom for a single hound to pass through. There must also be a door in the partition wall between each kennel, to admit of two lodging rooms being thrown into one in warm weather. The benches may be made in the way described for the kennels of sporting dogs. Stone or iron troughs filled with fresh water, should be placed where the hounds can have free access to them at all times.

At the rear of the building should be a covered passage paved with brick, leading from the lodging rooms into the feeding house, which is to stand under the same roof as the boiling house. On both sides of this passage there should be a paved court, with a small lodging house at each end; one for lame, and one for sick hounds.

With a very little additional expense, the passage may be used as a warm bath, by sloping the bricks from each end to the centre, where a large, flat stone with a plug-hole will let off the water into a drain.

The experiences of the late Mr. Assheton Smith at Tedworth are valuable. "The kennels there were originally built," says Sir John Eardley Wilmot, "on rising ground above the stable, but

owing to the hounds constantly suffering from kennel lameness, although every precaution of draining, ventilation, and paving was resorted to, the situation or subsoil (chalk upon clay) was deemed unhealthy and condemned." Mr. Smith had observed that when the lame hounds were removed below the hill to his home farm, and turned into the calf pens there, they soon recovered. This induced him at once to fix on that spot, well sheltered by trees and buildings from the north and north-east, for the site of the present excellent kennels. Mr. Smith at first had the flooring of his kennels paved with flint stones; but on one occasion, when his hounds were suffering from shoulder lameness, he found it necessary to move them so quickly that a roomy cart shed was provided for them. The flooring of this shed was of chalk well rammed down. Here the hounds soon recovered; and upon the flint stones in the kennel being removed, a great deal of moisture was found collected underneath. From this time the yards of the kennel were laid with hard clay or chalk, and the hounds were strangers to kennel lameness ever afterwards.

GREYHOUND KENNELS.

Greyhounds require warmer kennels than Foxhounds. A very good plan, and one now generally adopted where many Greyhounds are kept,

is to build one, two, or four lodging rooms in one block, in the centre of a small paved yard, which should be covered by the same roof that protects the lodging rooms. Each lodging room should communicate by a door with the yard, and the yard itself should be enclosed by open pales, sufficiently strong to support the roof, and far enough apart to admit the light and air freely, and of course not so wide as to allow the dogs to pass through. The benches may be of the same kind as those described above, and proper drainage is as essential as in other kennels.

Kennel Management of Fox-hounds, etc.

I have already treated the subject of feeding under the head Food. The rule to be observed with respect to quantity in feeding hounds, is that the food should be in proportion to the work done. Consequently hounds should be fed during the season on the very strongest food—meal, and good horseflesh or mutton. In the summer, when they take less exercise, and are very liable to get mangy, they should have less strong food, and a liberal allowance of nettles, cabbages, and mangel wurzel boiled with it. Indeed bleeding, frequent dressing, or the use of severe doses of medicine is now abandoned in most well-regulated kennels, and it is found that the hounds can be kept in better health with plenty of gentle exer-

cise, the use of fresh vegetables and the occasional employment of alteratives, such as sulphur or cream of tartar,—of each 5 or 10 grains given every night, or half the quantity twice a day, and continued for three or four days.

Wheat straw alone is used in kennels, and should be changed every third day, the beds thoroughly shaken up into one corner, and the benches well brushed over every morning while the hounds are being exercised; otherwise dust will accumulate, and nothing is so likely to irritate the skins of the hounds, causing itching and sometimes mange. If this plan is followed and the walls frequently whitewashed, there is little chance of annoyance from fleas or ticks.

Few huntsmen can be got to pay sufficient attention to brushing their hounds. Some masters of hounds insist on this being done constantly; it is certainly a troublesome operation, but nothing conduces so much to the health and comfort of the hounds, or so much improves their appearance.

If the hounds could be thoroughly dried afterwards, the use of the warm bath after a day's hunting would no doubt be beneficial; but as it is nearly impossible to do so, it is better to be content with making the tired hounds thoroughly warm and comfortable on their benches after brushing the dirt off them, and giving them a warm foot-bath in the passage. The constant use of the

cold bath in summer is, according to Scrutator, apt to produce mange.

The feeding of the hounds, though it is often deputed to the feeder, should, when possible, be superintended by the huntsman himself; for it is a means of enforcing discipline and accustoming the hounds to the voice of the huntsman, and the habit of obeying him implicitly is of course invaluable in the field. The feeding takes place at about 11 o'clock after the regular morning exercise; but on the day before hunting, the meal is generally given at about 1 or 2 o'clock.

The feeding of the hounds is managed as follows. Let the troughs in the feeding court be filled with the *puddings*, and then, the door communicating with the lodging-house being opened, each hound is to come out as his name is called. The feeder usually allows three or four couples to feed at a time, according to the size of the troughs, and dismisses each lot when he thinks they have had enough. A whip is generally in the hands of the feeder at this time, and is necessary to enforce discipline; but he should use it as little as possible, neither cracking it needlessly, nor using it severely upon those hounds who commit the venial offence of coming out of their turn to be fed.

KENNEL MANAGEMENT OF GREYHOUNDS

Is the same as that recommended for hounds, except that Greyhounds, being more delicate animals, require greater attention and warmer clothing and lodging. The training of the Greyhound is described at p. 141.

THE GENERAL MANAGEMENT OF HOUSE DOGS, ETC.

For directions as to food, exercise, and lodging, the reader is referred to the remarks under those heads at the beginning of this chapter.

Dogs kept constantly in the house, must be let out at least four or five times a day for a few minutes, otherwise it is cruel to punish them for want of cleanliness.

All dogs, whether long or short haired, are better for being brushed once a day; it conduces to the health, and greatly increases the comfort of the animal. A dog who is well brushed regularly seldom requires washing, and is never infested with vermin; but if the dog is to be washed, let it be done with yolks of eggs and not with soap, which irritates the skin, inflames the eyes, and by temporarily depriving the skin of its natural oily secretion, makes the dog extremely liable to become chilled afterwards.

The washing with the yolk of eggs may be managed as follows: let the dog stand in an empty tub, rub

the yolks of two, four, or more eggs by degrees into his coat, adding lukewarm water, a little at a time, until the dog is covered with a thick lather. When it is well rubbed in over the whole coat, pour clean warm water over the dog till the egg is entirely washed out.

The advantages of this process are, that the dog's coat does not lose its glossy appearance afterwards, and that the whole operation can be performed quickly and quietly, and without any splashing of water or rough handling.

To remove fleas, take enough soft soap to rub into the whole coat of the dog; add to this a teaspoonful, more or less according to the size of the dog, of spirits of turpentine: rub this mixture well into the roots of the hair, adding a little warm water to make it reach the skin. Let this remain on for a quarter of an hour, then plunge the dog into a warm bath, and rub off the mixture with the hand. Care should be taken not to let it get into the eyes, and to wash it completely out of the skin.

I must caution the reader against allowing the mixture to remain on too long. The turpentine then acts as a blister, and might prove fatal. A case was lately mentioned in the 'Field' of a dog, who, being left for a night with the turpentine and soap upon him, was found dead in the morning. Applied in the way I have recommended, it is, however, perfectly safe, and is the only reliable

way of clearing a dog's coat of fleas in a single operation.

Common yellow soap-lather left on for a few minutes, and then washed out, is a simple method of killing fleas; and if practised three or four times at intervals of a day, will kill the eggs as well, and so rid the dog permanently of his tormentors, but at some risk of giving him a chill.

CHAPTER XII.

BREEDING.

So little is known of the general principles upon which the breeding of dogs should be conducted, so many wild opinions are entertained upon the subject, and the data hitherto collected upon this obscure point are so scanty, and in a great measure so unreliable, that I shall not venture to bring forward any more unsupported theories, but will be content to repeat those axioms for the use of the breeder which are, at all events, founded on common experience.

The offspring partakes in an equal degree of the character of both parents. It is an unsettled question in natural history, whether the father or the mother contributes most to the formation of the progeny; but the fact of its being so disputed a point, is of itself a proof of the truth of what I have laid down, as showing how little evidence can be adduced on either side.

Breeding in-and-in is the only way of securing the purity of a particular strain. This has also been disputed; but it is so clearly a law of nature that animals should breed *in-and-in*—as witnessed in the case of red deer and other gregarious ani-

mals—and the success of such *in-breeding* has been so satisfactorily established in every variety of domesticated animal, such as the horse, sheep, ox, &c., as to need no further argument to support it.

"In-and-in breeding" has, however, been carried too far in many cases, and if too long persevered in, degeneracy is sure to follow. The general rule laid down by Mr. Graham, who has had more experience and more success in the breeding of Greyhounds than perhaps any one else, is, that "once in and twice out" is the proper extent to which to carry "in-breeding;" but there is no doubt that the system has been extended much further than this with success. I possess a bull-bitch of a very pure strain, who is a remarkable instance of the success of "*in-and-in* breeding," having been bred from a brother and sister. This animal is remarkable for strength, courage, beauty, and docility, as a proof of which latter quality, it may be mentioned that she is a staunch and excellent retriever. The in-breeding of the parents of this bitch had been, it was supposed, carried far enough, and the last litter was the result of an accident.

But *in-and-in* breeding must be practised with caution and judgment when the parents are so nearly related as this, and nothing can justify it but the fact that they are both particularly good, and that the same defects do not predominate in both. Mr. Meynel, whose success in *in-and-in* breeding was very great, frequently bred from

brother and sister, but only under the circumstances I have mentioned.

There is a tendency in the offspring to "throw back" to an ancestor removed by one or more generations. There is no doubt as to this fact. In a litter of Greyhounds, of which both sire and dam are smooth, and their sire and dam also smooth, a puppy may be rough, having "thrown back" to an ancestor who was rough three generations back. In a litter of Bull-terriers, one puppy is often found with the short face and round head of the Bull-dog, while the others have heads resembling the parents.

These facts afford another argument in favour of "in-breeding," as it is obviously impossible to foretell the result of breeding, unless it is confined to one particular strain.

The conformation and disposition of the parents are transmitted to the offspring. This must be accepted with allowance for the exceptional cases when the breed throws back to ancestors.

A defect or peculiarity in one parent is to some extent counteracted by an opposite defect or peculiarity in the other; so that the perfections of the one correct in the produce the imperfections of the other parent. A dog with long legs being put to a bitch with remarkably short ones, the offspring is likely to have legs of moderate length. This is one secret of successful breeding in all animals, and should never be lost sight of. But there should be

no great dissimilarity between the parents, otherwise the result will be a failure.

The bitch should never be much smaller than the dog. It follows, from what has been said, that there should be no great disparity in size between the parents; but, in addition to this, if the dog is much larger than the bitch, parturition will be difficult and dangerous. In the application of this rule, allowance must be made in the case of those breeds where the dog is 2 or 3 inches taller than the bitch.

Breeding should only take place from parents in full health, and neither too young nor too old. The dog is considered full-grown at two years; the bitch at eighteen months. The dog, unless he is remarkably strong and vigorous, should, perhaps, not be used after his ninth year; and with the bitch breeding is sometimes a dangerous experiment after the sixth or seventh year.

All brood bitches should possess a certain length in the flank and width over their loins—a form answering to what is termed "roomy" in mares.

By a careful attention to the above maxims, and by the exercise of good judgment in selecting animals to breed from, success may be almost reduced to a certainty. It should be distinctly borne in mind, that successful breeding is never, or very seldom, the result of accident.

General Management in Breeding.

The female goes sixty-three days with young. She has on an average seven at a birth, sometimes many more. I know of a Mastiff bitch, who, in three successive litters, had seventeen, nineteen, and twenty-one puppies, though she never succeeded in rearing a single one. The number of puppies that the bitch is allowed to rear, should rarely exceed five or six; but this will depend upon the health and strength of the mother. Five is the number always allowed to a strong fox-hound bitch.

The best time of the year for breeding is the summer and autumn.

When the bitch is in pup, she should have gentle exercise throughout the whole period. Great attention should be paid to her diet, to prevent her from getting either too fat, or too thin and weak. She should be fed twice a day regularly. She should not have too much meat, and skim-milk mixed with her food, may be beneficially substituted for it; giving her an occasional bone to pick.

When she begins to get restless, and to look out for a place to whelp in, she is generally within about a week of her time. She should then be separated from other dogs, and put in the place in which she is intended to whelp. Her food should be less heating, and raw meat should not be given. For a small bitch, bread and milk is an excellent food at this period. To obviate constipation,

boiled vegetables should be frequently mixed with her food. It is better to avoid medicine, but if it is absolutely necessary, a mild laxative may be used, such as the castor oil drench (castor oil, 2 ounces; syrup of rue, 1 ounce; dose one tablespoonful).

If possible, the bitch should have a separate room to bring forth her young in, in a corner of which a piece of thick carpeting should be nailed. She should then be left as quiet as possible, still, however, continuing her exercise every day. In the case of Greyhounds and other valuable animals, the bitch is often led out for exercise during the last week. If it is not possible to give the bitch a separate room, she should have a warm corner in a barn or outhouse. In any case she should lie upon carpet or sacking, not straw, in which the puppies are apt to get smothered.

When labour has begun, it is better, if the bitch is shy, not to interfere with her, as in such cases she sometimes destroys her young. When it is over, which it generally is without any trouble if my previous directions have been attended to, the bitch should have some lukewarm milk and water, and be fed on milk and slops given lukewarm. When the flow of milk is fully established, which it seldom is till the third day, the bitch should have two full meals a day, and more meat than usual should be given. It is generally necessary to give her a dose of medicine a day or two after

the birth of the puppies, in which case the medicine mentioned above can be used.

It is by no means necessary to keep the bitch always with her puppies; she should be away from them for an hour or so every day, and after the first week, she need not visit them more than five or six times in the day. If the puppies are observed to get thin, or are evidently too much for the strength of the bitch, they can be easily induced to lap raw milk thickened with meal, at the end of about ten days.

The Choice of Puppies.

Before they are weaned, the choice of puppies is a difficult matter; but as it is often necessary to buy puppies in the nest, I shall give some directions for their selection.

Puppies of sporting breeds are usually held up by the tail, and if they put back their fore-legs beyond their ears, they are said to have good shoulders. The shape of the chest and ribs, and the form of the legs, can generally be guessed at, and the colour of the puppy is, at all events, ascertainable.

To judge of Greyhound puppies, they are sometimes held in the air by the toes of the fore-legs, and those whose hind-quarters hang lowest are considered to be the most promising.

Dog-fanciers have a method of telling whether a

puppy will have a good head, in which they have great faith, but which is rather difficult to describe. They place the hand over the head of the puppy, so that the palm of it will push back the ears; and the head is pronounced to be a good one, if the breadth across the forehead is greater than its length down to a point between the eyes. This rule applies particularly to so-called "short-faced" dogs, such as Bull-dogs, Pugs, and King Charles's.

In judging of Bull-dog and Bull-terrier pups the *eyes* are of importance, and should be carefully examined. The eye of the puppy should be closed with the finger; if the slit then formed by the eyelids runs across or nearly across the head, it is considered a good point; it is a bad point if it runs parallel to the length of the head.

A black nose is desirable in every breed of dogs; and as the nose of a young puppy is invariably red, it is important to ascertain whether it is likely to become black or to remain flesh-coloured. It can be foretold as follows: when the puppy is ten days or a fortnight old, a small, indistinct, bluish-black mark will generally be observed on his nose. *If this mark is situated in the centre of the slit which divides the nostrils, the nose will be black*; if in any other part of the nose, it will be partially black; if there is no mark at all, the nose will be flesh-colour.

By far the best recommendation in a puppy is *fatness*; partly because fat is a sign of a good con-

stitution, partly because the being able to get a fuller share of milk than the others is itself a sign of greater strength.

The puppies should be weaned at the end of six weeks, before which time they should be accustomed to eat milk or broth, thickened with flour or fine meal. When it is determined to wean them, the puppies should all be removed at once, and the bitch should have a dose of Epsom salts or castor oil, to stop her milk.

The puppies should be fed at regular hours, four times a day, with the same food as was given them before weaning, gradually adding a little cooked meat as they grow. In three or four months they will eat the same food as grown dogs, but they require to be fed three times a day till they are six months old, and twice a day till they are a year old. Puppies of all ages, like grown dogs, should have about an ounce of food to every pound in their weight; and they should never be allowed to go on eating as much as they are inclined to, for some puppies, particularly those suffering from worms, have the most ravenous appetites.

It is usual, in the case of valuable breeds, to put those puppies which the mother cannot herself suckle, to another bitch. The experiment generally succeeds when the foster-mother has not herself whelped too long before, in which case she often refuses to have anything to do with strange puppies; and it is a question in such a case whether the

nature of the milk itself does not undergo such a change some time after parturition as to make it unwholesome food for newly-born puppies.

Before putting the strange puppies to the bitch, all her own puppies should be taken from her except two or three. Then put the fresh ones in the nest with those that remain. Let them stay there for a couple of hours before the mother is introduced to them; then bring her in, and if she allows them all to suck her, making no distinction between her own and the strange ones, she can be safely left with them. If the bitch refuses them at first, she seldom gets over her aversion, and it is useless to attempt to force her to take to them kindly. In this case, if it is very desirable to rear the puppies, the foster-mother must be held down, and the puppies allowed to get their fill of milk five or six times every day. They must be kept near the fire in a basket lined with a piece of blanket.

The Lodging of Puppies

Should be dry and warm, and must be kept scrupulously clean; otherwise their skins are irritate by dust and dirt and the attacks of vermin, &c., and they become liable to mange.

Exercise of Puppies.

Exercise is, it need not be said, of the first importance to puppies, as to all young animals. To

allow them constant access to an open paved courtyard is perhaps the best way of giving them exercise.

If allowed to run, unwatched, in a field or garden, they are apt to get into mischief by eating filth, &c.

Medicine for Puppies.

Medicine is seldom necessary for puppies which are properly managed, except in cases of serious illnesses.

Diarrhœa should be left to itself for a day or two; if it does not then stop, give one or two teaspoonfuls of castor oil with three drops of laudanum. If that is not effectual, give, at intervals of two hours, a teaspoonful of the following mixture:—prepared chalk, 2 drachms; gum-arabic, 2 drachms; laudanum, 3 drachms; water, ¼ pint.

For constipation give green vegetables with the food, or give as a laxative a small teaspoonful of castor oil and the same quantity of olive oil.

For attacks of *worms*, to which puppies are very liable, and which require careful and particular treatment, see directions under the head Worms.

For treatment of *mange* in puppies, see Mange.

Cropping.

Youatt objects to cropping the ears of Terriers on the score of its cruelty, and its being liable to

make them deaf. I never knew or heard of a case of deafness which could be traced to this cause. The only real objection to it is the pain inflicted by the operation itself; and this is by no means so great as would be supposed by those who have not witnessed it, though the dog suffers a good deal of uneasiness while the wound is healing.

Puppies are cropped from the fourth to the eighth month. It is an operation which requires some practice, and cannot be performed by an amateur without inflicting a great deal of unnecessary pain upon the dog, and making a very bungling job of it after all. No one therefore should attempt it who has not seen it done several times, and not more than two cuts should be given with the scissors. After all that can be said for it, cropping is a cruel and unnecessary custom.

ROUNDING.

It is the custom in every kennel to round off a certain portion of the ears of Fox-hounds.

Rounding should not be performed while the dog is recovering from distemper, as the loss of blood which takes place is very weakening. This operation is not open to the same objection of cruelty as cropping, for it prevents their ears being torn by thorns, or gorse prickles, in drawing coverts.

Dewclaws.

The dewclaw, or extra toe on the hind-foot, must be cut off with a pair of sharp scissors when the puppy is between three and four weeks old. If left on, it causes much inconvenience, and sometimes great pain to the dog, by catching in grass and sticks, and getting torn. I have seen a dog completely lame from this cause. Youatt, however, who never loses an opportunity of being humane, advises its being left alone.

CHAPTER XIII.

DOG STEALING.

The difficulty of taking out a dog in the streets of London is proverbial. The most careful watching on the part of the owner seems useless: he takes his eyes off the dog for an instant, and when he looks again it has disappeared. There is no thief to be seen,—no suspicious-looking person with a basket,—no boy tearing round the corner with a bundle; and, of course, no policeman near for the bewildered owner to appeal to.

Perhaps an account of the manœuvres generally practised by dog stealers may explain the mystery. These men practise their trade in pairs. When a sufficiently valuable dog is seen following his master, the least respectable of the two thieves walks about fifty yards ahead of him and drops at one place (generally a corner) a small quantity of boiled liver, called "duff," cut up in small pieces. The dog naturally lags behind his master to eat it, and the second thief, usually dressed as a respectable mechanic, with an apron, catches him quickly up, covers him with his apron, and coolly walks by the owner, who, when he misses the dog, never dreams of suspecting any one who is not running away.

The "duff" which I have mentioned above is a particular part of the liver, very moist and with a strong smell—irresistible to most dogs. Some highly-fed lap-dogs, however, will not touch it; and it is said, in flash language, of an animal that has been tried with it and not yielded to the temptation, "the dog won't duff." This duff is sold under its proper name in many cook shops in London.

The dog, being stolen, is afterwards disposed of in one of two ways: either he is kept to be ransomed, or he is sent to Paris, to one of the Universities, or to one of the manufacturing towns, where he can be disposed of at a good price, and with no risk of detection. But the first course is invariably adopted if the owner can be heard of, and is managed as follows.

The stealer, who is usually a rascal of small substance, sells him for a few shillings down, to receive a larger sum when the dog is reclaimed, to one of a class of men called dog brokers. This person waits to see if the dog is what is termed "chanted,"* that is, advertised for as lost, or in any way inquired after by his owner. If so, he calls upon, or sends to the owner to say that he has heard of his dog by accident, and that he can undertake to return him for a certain sum—generally from £2 to £6 or £8. Under these circumstances, the owner's best course is to express no anxiety about the dog, and to name a certain sum—

about one-quarter of what the man asks—as what he will give for him. The broker, who generally measures the ransom by the anxiety of the owner, will, after some bargaining, come to terms. I do not think that more than £2 should ever be offered for any but the most valuable animals. The dog may not be returned for a week, or even a fortnight, in hopes of a higher offer; but the owner is sure to have him at last if he is firm.

As dog stealers are almost always fully aware of the address of the owner of the dog, it is useless to advertise, and even worse than useless, for it is evidence of a strong desire to have the dog back; and the ransom is always raised in proportion to this eagerness. In fact the sum asked is seldom calculated by the real value of the dog; and I have known £8 to have been obtained on three different occasions for the same dog, a nondescript mongrel not worth five shillings, but a great favourite of his master's.

A dog is not safe from dog stealers even if he has a chain and collar on, if he is entrusted to a careless person. I have heard of a valuable dog which had been twice stolen and brought back, and which his master determined never to trust out of the house again without a chain. He was one day, however, sent out for a walk with an Irish servant, who came back without him, declaring that the dog had slipped his head through the collar when he was not looking. The dog was in a few

days brought back, and his master again ransomed him, making it a condition of his doing so that the thief should tell him how the dog had been stolen; which, it appeared, was as follows: the servant had stopped to look at some of his countrymen mending the street, and, while so doing, one thief had held the dog's chain tight with one hand to imitate the pulling of the dog, while with the other he undid his collar, wrapped him in his coat, and then pointing to his companion, who ran away, he told the servant that the fellow had just stolen his dog. Of course the Irishman set off in pursuit.

Even when a dog has been actually lost, and found by a respectable person, technically called a "flat," it is better not to advertise, nor even to send out handbills. The thieves, who make it their business to have an exact description of every dog on their beat, are always on the look out for such notices; and, from their being able to describe the lost dog accurately, often succeèd in getting it themselves from the finder.

If a dog, therefore, has strayed or been lost, notice should be given to the policeman on duty, or the fact mentioned at the nearest police-station, to which any honest finder is certain to bring it.

Observations on buying Dogs.

Great caution must be used in any dealings with dog-fanciers, who, I suppose, are so called from

their fancy for other people's dogs, and who are of course only too ready to sell worthless animals for large prices.

In choosing a dog, his age is of the first importance. It is not possible to tell the age accurately by the appearance of the teeth, as this will depend, in a great measure, upon whether the dog has been fed upon soft or hard food. There are, nevertheless, certain indications which are tolerably safe guides. At about the age of six months the puppy has changed his milk-teeth for permanent ones: after these have grown to their full size, and until the age of three years, no very perceptible change takes place in the teeth, beyond their points becoming gradually blunter. At this age they become slightly covered with a yellow tartar, which slowly increases, till at a period varying from six to ten years, the whole surface of the teeth gets discoloured, and the teeth themselves much worn down and irregular. There are also certain indications of advanced age shown in the greyness of the muzzle and of the head, particularly round the eyes.

With the view of ascertaining if a dog is sound in constitution, he should be generally examined; and first his *eyes* must be looked to. If they are bright, not bloodshot, and have no discharge, and the inside of the lid is of a natural colour, they may be pronounced sound.

The *ears* must be inspected, to see that there is

no redness inside, and no ulceration of the tip; and the root of the ear must be felt and pressed to ascertain if there is any pain. Any of these indications betoken the presence or the approach of canker.

The hand should then be passed along the *back*, to find out if there be any tumour, &c.

The *skin* should be looked at through the hair, in several places, to see if it is red or scaly; it should then be felt between the fingers; in a healthy dog it should feel soft and pliable.

In all sporting dogs the *feet* should be separately inspected; and the length of the claws must be ascertained, as a guide to the exercise the dog has been taking, as shown by their length or shortness. The hardness of the *pad*, so essential in Greyhounds, Pointers, &c., must be ascertained by the touch.

CHAPTER XIV.

COURSING.

COURSING is of two kinds, public and private. The object in public coursing is not so much to kill the hare, as that the Greyhound employed should display the greatest amount of speed, stoutness, working power and courage. It is clear that the possession of a superiority in these qualities cannot be shown by the mere act of killing the hare, inasmuch as the worse Greyhound of two employed in a course, runs a greater chance of killing the hare by having it turned towards him by his companion.

In public running, therefore, the course is won by the dog who displays the most of the four qualities I have mentioned above. This is determined by the number of points made by each dog, in accordance with the rules drawn up by the National Coursing Club.

TRAINING.

For public running, it is essential that the Greyhound should be put into training, which is done by giving him less food than usual, but in a more concentrated form, by giving him medicine, if necessary, by letting him have regular exercise,

more or less according to the strength of his constitution, and by paying the greatest attention to his general health.

With regard to *food*, the best meat for a Greyhound is unquestionably lean mutton; but many Greyhounds are trained on horse-flesh. The quantity of meat given should vary from one-half to three-quarters of a pound, according to the size and health of the dog. The meat is to be chopped up and mixed with a little bread soaked in broth, the quantity to be determined by the health, too much meat being liable to make the dog bilious, or derange his stomach. It is a good plan to change the kind of meat occasionally; giving horse-flesh or beef for a day, and then coming back to mutton.

It does not, in my opinion, answer to leave water in the dog's kennel, though this plan has been recommended. In the first place, many dogs in perfect health are apt to drink more than is good for them, to the injury of their wind, apparently from seeing it before them. Another objection is, that seeing the dog drink is one of the best methods of judging whether he is getting too much meat; in which case he will be slightly feverish, and drink more than usual. It is better, therefore, to let him have access to water three or four times a day.

There are two objects to be gained by *exercise*,—the reduction of superfluous fat, and the strengthening of the muscles. Strong exercise may be given, either by making the dog follow a man on horse-

back, or by "slipping," which is done by a person, who is a stranger to the dogs, leading them about half a mile from the trainer, who then calls them to him. It is also advisable to give the Greyhounds some amount of exercise in following a horse on a road, for the purpose of hardening their feet; but this is usually done at the commencement of training. The Greyhounds must be out at least three or four hours every day; but as exercise need not be taken at more than a foot's pace, it is not necessary for the trainer to be on horseback.

Great experience is required in the trainer to know how much work a Greyhound will require to bring him into training. It will depend in a great measure on the dog's stoutness, and on the ground he will be required to run over.

A dog will generally require two or three months to prepare him thoroughly; the first part of which time he will have walking exercise only, with an occasional short gallop upon turf after a horse—these gallops being given two or three times a week, till within ten days of the time, when "slipping" will be substituted for them, by which means the very highest degree of wind will be attained.

Medicine should only be used when absolutely necessary. Salts and aloes are perhaps the best. Emetics are disapproved of in most works on the subject; but if the dog is dull and listless, they have sometimes a great effect in making him lively,

by relieving the stomach; but they should be used in moderation.

When the dog has come in from his exercise, he should be well rubbed down, either with a very rough towel, or with horsehair gloves, which are better still.

The Rules of the National Coursing Club, by which all public coursing is conducted, are as follows.

Rules of the National Coursing Club.

"1. Every course shall be decided according to the judge's estimate of the balance of points in favour of either greyhound. The value of the points in a course, viz. the cote, go-bye, wrench, turn, trip, or kill, as well as allowances or penalties, to be for the present considered as settled by Thacker's rules.

"2. The judge shall deliver his decision *aloud*, immediately the course is ended, and shall render an explanation of such decision (when called in question) to the stewards of a meeting. His decisions once given shall not be liable to be reversed; but complaints against him may be lodged with the National Club, who, upon proof of gross mistakes, shall record their censure, and recommend his non-employment for such a period as may seem fitting.

"3. If a greyhound be unsighted in going from

the slips, or afterwards, it shall be at the discretion of the judge to decide what allowance, *if any*, is to be made under the circumstances.

"4. If a second hare be started during a course, and one of the dogs follow her, the course to end there.

"5. A 'no-course' is where sufficient has not been done to show superiority in either greyhound, and shall be run at the expiration of two courses. An 'undecided course' is when the judge considers the merits of the dogs so equal that he cannot decide. This need not be run again if one greyhound be drawn, but the owners must at the time declare to the Secretary which dog remains in. If they decide to run again, they *must* do so after two courses. If the last course of the day, fifteen minutes shall be allowed after both dogs are taken up.

"6. The control of all matters connected with slipping the greyhounds shall rest with the stewards of a meeting.

"7. When two greyhounds drawn together are of the same colour, they shall each wear a collar, and shall be subject to a penalty of 10*s*. for non-observance of this rule; the colour of the collar to be red for the left-hand side, and white for the right-hand side of the slips. After the first round, the upper dog on the card for the day will be placed upon the left hand, and the lower dog on the right hand, in the slips.

"8. If through accident one greyhound gets out of slips, the slipper shall not let the other go. If the slips break and the dogs get away coupled together, the judge shall decide whether it is to be a no-course, or whether enough has been done to constitute it an undecided course. In any case of slips breaking and either or both dogs getting away in consequence, the slipper may be fined not exceeding £1 at the discretion of the Steward.

"9. If any subscriber or his servant shall ride over his opponent's greyhound while running a course, the owner of the dog so ridden over shall, although the course be given againt him, be deemed the winner of it, or shall have the option of allowing the other dog to remain in and run out the stake, and in such case shall be entitled to half his winnings, if any.

"10. Any person allowing a greyhound to get loose, and join in a course which is being run, shall forfeit £1. If the loose greyhound belong to either of the owners of the dogs engaged in the particular course, such owner shall forfeit his chance of the stake with the dog then running; unless it can be proved to the satisfaction of the Stewards that the loose greyhound had not been able to be taken up after running its own course. The course *not* to be considered as *necessarily* ending when the third dog joins in.

"11. If any subscriber openly impugns the decision of the judge on the ground, he shall forfeit

not more than five nor less than two sovereigns, at the discretion of the Stewards. Any complaint which he has to make shall be notified to the Secretary or one of the Stewards, who shall take steps to bring the matter before the proper authorities.

"12. The Secretary of any proposed open meeting shall associate with himself a committee of not less than three members to settle preliminaries. The management of the meeting shall be entrusted to Stewards and Field-stewards (in conjunction with this committee), who shall be elected by the subscribers present the first evening of a meeting. The Secretary shall declare as soon as possible how the prizes are to be divided; and a statement of expenses may be called for by subscribers after a meeting if they think proper.

"13. The appointment of the judge shall be determined by the votes of the subscribers taking nominations, but each subscriber shall have only one vote, whatever the number of his nominations; it shall be open to subscribers, within a fortnight of the judge's name being declared, to withdraw from their nominations, paying half forfeit. The appointment of the judge to be published at least one month before the meeting, and the number of votes in favour of each judge to be declared, if required.

"14. If a meeting appointed to take place upon a certain day be interfered with by frost, the

committee shall have power to postpone it, but not beyond the week. If, through a continuance of frost, the meeting be void, the subscribers shall be liable to their quota of expenses. This rule not to apply to Produce-meetings.

"15. Immediately before the greyhounds are drawn at any open meeting, the place and time of putting the first brace of dogs into the slips on the following morning shall be declared, and the owner of any dog which shall not be ready to be put into slips at such appointed time and place, or in proper rotation afterwards, shall be fined £1; if not ready within ten minutes from such time, the absent greyhound shall be adjudged to have lost its course, and the opponent shall run a bye. If both dogs be absent at the expiration of ten minutes, the stewards shall have power to disqualify both dogs, or to fine their owners any sum not exceeding £5 each.

"16. No entry by a subscriber shall be valid unless the amount of stake be paid in full, when a card or counter bearing a corresponding number shall be assigned to each entry. These numbered cards or counters shall then be placed together in a bowl and drawn out indiscriminately. This classification once made shall not be disturbed throughout a meeting, except for the purpose of guarding, or on account of byes.

"17. When more than one nomination is taken in the name of one person, his greyhounds shall be

guarded, but not exceeding two dogs in a 16-dog stake, four in a 32-, and eight in a 64-dog stake, except by special agreement. In Produce Stakes any number may be guarded if *bonâ fide* and exclusively the property of the nominator. This guarding is not, however, to deprive any dog of a natural bye to which he may, in running through a stake, be entitled.

"18. No greyhound shall run more than one natural bye in any stake, and this bye shall be given to the lowest available dog on the list in each round. In Puppy Stakes each bye must be run with a puppy or single-handed.

"19. If any subscriber shall enter a greyhound by a different name from that in which it shall last have run for any stake or piece of plate, without giving notice to the Secretary of the alteration, such greyhound shall be disqualified.

"20. Any subscriber taking an entry in a stake, and either prefixing the word 'Names' to a greyhound *bonâ fide* his own property, or not prefixing the word 'Names' to a dog which is not his own property, shall forfeit that dog's chance of the stake. He shall likewise be compelled to deliver in writing to the Secretary of the meeting the name of the *bonâ fide* owner of the dog named by him. This communication to be produced should any dispute arise in the matter. Greyhounds which belong to confederates, and are sometimes entered in one, sometimes in another

owner's name, shall have a cross prefixed to their names.

"21. For Produce Stakes, the names, ages, colours, and distinguishing marks of the puppies shall be detailed in writing to the Secretary at the time of entering them. The subscriber must also state in writing the name of the sire or sires, the dam, and their owners, together with the names and addresses of the parties who bred and reared the puppies, and where they are kept at the time of entry; and any puppy whose marks and pedigree shall not correspond with the entry as thus given shall be disqualified, and the whole of its stakes forfeited. No greyhound shall be allowed to run in any Puppy Stake whose description is not properly given as above, and it must be capable of being proved, if required by the Secretary or Committee. No greyhound to be considered a puppy which was whelped before the 1st of January of the year preceding the season of running.

"22. An objection may be made at any time within a month, upon the objector lodging a sum of not less than £5, as may be required, in the hands of the Secretary, which shall be forfeited if the objection prove frivolous; and the owner of the greyhound objected to shall be compelled to deposit a like amount, and to prove the correctness of his entry. The cost of the expenses incurred in consequence of the objection to fall upon the party against whom the decision is given.

"23. Should an objection be made which cannot at the time be substantiated or disproved, the greyhound may be allowed to run *under protest*, and should the objection be afterwards substantiated, and if the winnings have been paid over to the owner of a greyhound who will thus be disqualified, he shall return the money, or be declared a defaulter. The money returned shall be divided equally among the greyhounds beaten by the dog thus disqualified.

"24. If two greyhounds belonging to the same owner or to confederates remain in for the deciding course, the stake shall be considered divided, as also if the owner of one dog induce the owner of the other to draw him for any payment or consideration; but if one greyhound be drawn from lameness, or from any cause clearly affecting his chance of winning, the other may be declared the winner, the facts of the case being proved to the satisfaction of the Stewards.

"25. When more than two prizes are given, the greyhound beaten by the winner in the last class but one shall have precedence of that beaten by the runner-up. When only three dogs run in this class, then the greyhound first beaten of these three shall have the third prize; and the fourth prize shall be given to the greyhound beaten by the winner in the previous class, unless the winner had a bye in that class, in which case the fourth prize shall be awarded to the dog beaten by the runner-up in that class.

"26. If two greyhounds shall each win a stake, and have to run together for a final prize or challenge cup, should they not have run an equal number of ties in their respective stakes, the greyhound not having run the sufficient number of courses must run a bye or byes, to put itself upon an equality in this respect with its opponent.

"27. No person shall be allowed to enter or run a Greyhound in his own or any other person's name who is a defaulter for stakes or bets.

"28. If a judge or slipper be in any way interested in the winnings of a greyhound or greyhounds, the nominator of these dogs, unless he can prove satisfactorily that such interest was without his cognizance, shall forfeit all claim to the winnings.

"29. All bets upon an individual course to stand, unless one of the greyhounds be drawn. All bets upon a dog running further than another in the stake, or upon the event, to be p.p., whatever accident may happen.

"30. Where money has been laid against a dog winning a stake, and he divides it, the two sums must be put together, and divided in the same proportion as the stakes."

Mr. Thacker's Rules for the Decision of Courses.

"Rules 1, 2, 3, 4, 5, and 6 repealed by the above rules.

"7. A cote to be reckoned two points; and a

cote is when two dogs start even together, and one outruns the other, and gives the hare a turn or wrench; but if the hare take a circuitous route, and the dog which runs the outer circle gives the turn, to be reckoned three points.

"8. A turn to be reckoned one point; but if the hare turn not as it were round, she only wrenches; and two wrenches are equal to one turn. A wrench is when she strikes off to the right or left, at about a right angle. Anything short of that in a forward direction is only a rick or whiff, for which nothing ought to be allowed.

"9. A go-by to be reckoned two points; but one dog being behind the other, and then getting first, by the hare running in a curve, or any way but in a straightforward stretch, or by superior speed, when both are fairly on their legs after a turn, is no go-by; if a dog give half go-by, to be allowed one point for it, unless that half a go-by forms part of a cote, in which case it should be reckoned in the cote.

"10. Killing or bearing the hare to be reckoned two points, if it be a kill of merit; but if one dog turn the hare into the other dog's mouth, or the hare being taken by other casual circumstances wherein there is no merit in the dog, to reckon nothing; but there may be a kill which has not the first degree of merit in the dog, yet not without merit, wherein the judge shall use his discretion in allowing one point for it.

"11. A tripping or jerking the hare to be reckoned one point. A jerk is when a greyhound catches hold of a hare, but again loses his hold; and a trip is, when he misses his catch, but throws her up with his nose, or other hindrance of that kind. It has been said, when a hare is tripped or jerked that the dog ought to have held her, and that it is a clumsy trick in letting her go again; it may sometimes be the case, but whether it is or not, it contributes toward the main object, as it distresses the hare, and delays her so that his fellow-dog has the better chance of taking her; a dog giving either tripping or jerking generally effects quite as much as by giving a complete turn.

"12. If a dog take a fall in a course whilst performing his duty, to be allowed one point for it; if he fall from pressing the hare closely, or flinging himself to take her, and causes her to turn about, he is entitled to two points, one for the fall and one for the turn; or if the turn were by superior speed, he gains three points, one for the fall and two for the cote.—This rule is connected with the 7th and 8th rules.

"13. If one dog see not the hare when slipped by any accidental occurrence not his own fault, to be deemed no course; but if owing to his own untractableness or infirmity of sight, or the fault of his owner or servants, the dog that follows the hare to win, and the judge to decide whether his not seeing the hare was accidental or the fault of the

dog. If he afterwards join in the course, it must be in the discretion of the judge, if he deem it no fault in the dog his not seeing the hare when slipped, to give it *no* course; or decide it according to the merits of the dogs when running together, allowing for the distance or number of turns given by one while the other was absent from it, and comparatively not so much at work. But if his not seeing the hare when slipped was his own fault, or that of his owner or servant, the course to be given against him.

"14. If there be no turn or other point gained, an equal start, and the hare run in a straight direction, the dog leading first to the covert to win. If one dog lose ground at the start, and afterwards evidently gain upon the other by superior speed, though he does not pass or get even with him, yet, if there be no turn or other point gained between them, he ought to be deemed the winner: either dog leading first to the covert by an unequal start, an inside turn, or other occurrence where there is no superiority of speed shown, the course to be adjudged dead; but if the unequal start were the fault of that dog which lost ground by it, and who does not regain that loss by superior speed, he ought to forfeit the course for his own untractableness. But if a dog lose his start by the slipper standing still instead of running forwards for the dogs to press against the collar, and in his natural struggling to get to the hare when he sees her, has his eyes in

a contrary direction when loosed, it ought not to be deemed his untractableness, but the slipper's awkwardness.

"15. If a dog lose ground in the start by any untoward circumstances, not his own fault, and yet maintain equal speed with the other, if that other give the hare a turn, or gain any other point, but the course ends immediately by the hare gaining covert, sough, squatting in turnips or other brush, except killing her, that turn or point not to be allowed for, but the course to be adjudged dead. If that turn were gained by the advantage of an inside turn, the hare running in a curve, without any superiority of speed being shown, to be adjudged dead. If the course continue longer, and other points are gained, that first turn or point to be taken into the account; and if that unequal start were owing to the dog's untractableness, or otherwise his own fault, the turn or point gained by the other dog to entitle him to win.

"16. If a dog wilfully stand still in a course, or depart from directly pursuing the hare, or to meet her, the points he has gained to be reckoned only to the time he stood still, or left the course, though he may afterwards join in it. If the points he has gained up to the time he stood still or departed from the ordinary course should equal what the other gained in the whole course, his standing still, or leaving the course, to give the casting point against him. If both dogs wilfully stop with the

hare in view, to be decided by the number each gained; and if they are equal, to be decided by a toss up, though one run longer than the other. If one or both dogs should stop with the hare in view, and relinquish the pursuit through utter inability to continue it, the course to be decided according to the number of points each dog gained in the whole course, and not to that dog which ran the longest, though he continued the pursuit to the covert.

"17. If a dog refuse to fence where the other fences, his points to be reckoned only up to that time, though he may afterwards join in the course. If he do his best endeavour to fence, and is foiled by sticking in the meuse, or the fence being too high to top it, whereby he cannot join in the rest of the course, such course to be deemed to end at that fence. Should the points be equal between them, to be undecided; but if one be thrown out by being a bad fencer, and yet the points be equal, a good fencer to have a casting point over a bad one.

"18. If a fence intervene in a course that the judge cannot get over, and thereby lose view of the remainder of the course, the course to end at that fence.

"19 and 20 repealed.

"21. If the points are even between two dogs, and one evidently show most speed, that extra speed to entitle him to win; but where a dog has a balance of one point, and the speed of the other

is only a trifle more, the point to win. If very few turns or wrenches are given, and one dog has a balance of only one point and the other a great degree of superior speed, that speed to win. If the points be equal, and one has most speed at the first part of the course, and the other at the last part, if in equal proportion up to the last turn, or kill, the course to be adjudged dead; but if the points are equal, and speed also up to the last turn, and one shows more speed than the other in the run up to cover, that extra speed to win. If two dogs are slipped even, the course straight, without a turn, and one shows most speed at first and the other at the last part, so as just to get even with his fellow, *and no more*, the course to be adjudged dead."

CHAPTER XV.

GENERAL REMARKS ON THE DISEASES OF THE DOG.—MEDICINES.

In treating of this portion of my subject, I shall endeavour to do so in a manner that will be equally intelligible to the general and the professional reader. I do so in the belief that in many cases of disease the owner of the dog is more competent to have the charge of him, than the veterinary surgeon. The actual value of any dog is small in comparison with that of the horse, and the professional attendant can only be expected to bestow his time and trouble upon him in proportion to the smaller remuneration he receives,—and this is seldom enough; whereas the owner is disposed to take every care of an animal which is generally a favourite. In addition to this, many veterinary surgeons, who have made the horse their principal study, are perhaps not the best authorities for the treatment of an animal differing entirely from him in organization.

While most disorders can, with care and the exercise of good judgment, be successfully treated by the owner himself, there are some obscure diseases which always require professional advice,

and in surgical cases I should never recommend an amateur to perform any but the very simplest operations.

Medicines.

The list of medicines formerly used in the diseases of the dog was a very limited one. It is now larger, and might still perhaps be extended with advantage. Many valuable drugs have only recently come into use in the treatment of the dog, and the practitioner who has gained what experience he has before their effects were well known, is still naturally cautious in the employment of them. Among these medicines may be mentioned quinine, iodine, the Areca nut, cod-liver oil, arsenic, chloroform, and sarsaparilla; while the true use and value of many among these are still very imperfectly understood, quinine being often looked upon as a certain specific in every fever, and given in immoderate doses during high febrile action, while the great value of arsenic as an alterative and in convulsive disorders, is even yet not fully recognized.

The canine materia medica will, however, always be limited by the peculiar organization of the dog, whose stomach instantly rejects any substance in the slightest degree irritating.

In every case where the administration of medicine is recommended, I have given the formula and the dose required for a full-grown dog of me-

dium size, which I consider to be a dog weighing from 14 to 16 lbs. It is therefore needless to give a list of formulæ in this place.

The unprofessional reader should be on his guard against the incautious use of *mercury* in the diseases of the dog. This medicine, carelessly given, produces great and dangerous irritation of the coats of the stomach and bowels; but it is impossible to dispense with it, in the form of calomel or blue pill, in affections of the liver. I should recommend its never being given in doses exceeding 3 grains. It is, nevertheless, a common habit of farriers and country practitioners to administer this drug in doses of 5, 10, or even 15 grains.

On the other hand, *opium* is seldom given in sufficiently large quantities. In the human subject it has sometimes been fatal in a dose of $\frac{1}{3}$ of a grain when administered to a young child. To obtain the full effects of this valuable drug upon the dog, it should be exhibited in large doses; as a sedative, 1 grain may be considered the average dose.

Aloes may also be given to the dog in much larger quantities than is safe in man. 20 grains of the extract of Barbadoes aloes may safely be administered.

In prescribing for the dog, some attention should be paid to the practice of such unprofessional persons as game-keepers, farriers, &c., who use many time-honoured remedies in treating the diseases of the

dog; some of them, no doubt, improper enough; but many of their receipts are founded on a long experience of the constitution of the animal, and of these advantage should be taken: for instance, the common purgative given to dogs by such persons, is a mixture of equal parts of castor oil, syrup of rue, and syrup of buckthorn. This mixture is strongly condemned by Mayhew, a recent authority, while Stonehenge suggests that the rue should be left out of the mixture, and that, as the buckthorn is quite inert, syrup of red poppies should be substituted for it. Now this syrup of red poppies has of itself no value whatever, except that of a colouring ingredient, whereas buckthorn is an old-fashioned and tolerably effective purgative, and, being very cheap, is used to eke out the castor oil, which is a dear medicine. The syrup of rue is carminative, and is useful in preventing the castor oil from producing vomiting, which it is apt to do in many cases. So certain am I of the value of this receipt, that I have myself used it for many years, and always with excellent effect.

Action and Uses of Medicines in the Diseases of the Dog.

Acids.—The effects of the internal use of acids upon the system of the dog have not, to my knowledge, been determined by experiment. Acids are used externally as caustics (see Caustics) in the

destruction of excrescences, and dilute *prussic acid* is of the greatest assistance in allaying the irritation of the skin in some kinds of mange (see MANGE); it may also be used internally to remove sickness.

ALKALIES.—*Chalk* is useful in diarrhœa from its apparently astringent effects, but which are, no doubt, due to its neutralizing acids which irritate the bowels. *Soap*, used in combination with aloes or rhubarb, is very beneficial in cases of habitual constipation.

Ammonia (Liq. Amm.) is antacid and stimulant when given internally in doses of from 5 to 15 drops in milk or water. It is valuable in the last stage of fevers, particularly in distemper, when other stimulants cannot be used. The stronger preparation of ammonia (Liq. Amm. fortior) is much used as a blister (see BLISTERS).

ALTERATIVES.—This term is applied to such medicines as, being taken in very small and frequent doses, and continued for a length of time, by degrees effect a change in the secretions and in disordered actions of the body.

Most medicines used as alteratives are only effective as alteratives when given in very minute doses, and have either purgative or irritant effects when given in larger quantities: for instance, *mercury* in the form of blue pill is purgative in doses of 5 or 6 grains; if given in smaller doses, say of 2 or 3 grains, it produces its well-known

stimulating effect upon the liver, the kidneys, and the skin; but if given in minute doses of $\frac{1}{4}$ to $\frac{1}{2}$ a grain twice or three times a day, and continued for a long period, it causes an improvement in the digestive functions, and the disappearance of mangy eruptions.

In the same way *arsenic* becomes one of the most useful alteratives for the dog, when given in small doses. Two drops of Fowler's solution twice a day is enough to begin with; and this quantity should be increased to 4, 5, or 6 drops. Great caution must be used in the exhibition of this medicine; and it must be discontinued when it is shown to have taken a hold upon the system, of which the symptoms are a slight redness of the white of the eye, a running at the nose, and a loathing for food.

Antimony is also capable of a very wide application. Besides its use as an emetic and in the reduction of fever, it has a marked effect as an alterative in skin diseases, in doses of from $\frac{1}{16}$ to $\frac{1}{8}$ of a grain three times a day.

Iodide of potassium, in combination with *sarsaparilla,* is said to be of great use during recovery from rheumatic affections.

ANODYNES.—The chief of these is *chloroform,* the use of which should never be neglected in performing serious operations upon the dog, both from motives of humanity, and on account of the greater ease with which the dog can be operated upon when under its influence.

The administration of chloroform to the dog is managed as follows: the dog being placed upon a table and made to lie down, must be coaxed and patted till he is quiet. A napkin or handkerchief is then folded into a conical shape, and 15 or 20 drops of chloroform being poured into the small end, the other end is held over the dog's mouth and nose, and the narcotizing effect is produced in a few minutes. The inhalation must be continued till the dog is insensible. When the white of the eye may be touched without the dog's wincing, it is a sign that the operation may commence. If it is one which is likely to occupy any time, an attendant should be ready to apply the chloroform, whenever the animal exhibits signs of feeling pain. It must be remembered that the quieter the dog is kept while he inhales it, the more quickly will the drug have its effect.

The action of chloroform upon the dog is safe, certain, and complete; and no humane or careful man will fail to employ it. It is valuable in some diseases, as well as when operations have to be performed; it may be beneficially used where violent pain, spasmodic or otherwise, accompanies diseases of the bowels or lungs.

ANTISPASMODICS have a sedative effect upon the nervous system, and are used to allay spasms or irregular muscular action dependent upon the nerves. The most valuable antispasmodic that is used in the treatment of the dog is *sulphuric ether*:

a combination of this medicine with *opium* is of the greatest value in fits, colic, enteritis, &c.

ASTRINGENTS have the effect of contracting muscular fibres to which they are applied, as well as of coagulating albumen. Astringents are consequently useful in three ways:—1st, by contracting the small blood-vessels of a wound, and thereby stopping bleeding; 2nd, by exerting the same power of contraction when applied to mucous surfaces, and so diminishing excessive secretions, or stopping inordinate discharges from the bowels; and 3rd, they diminish the relaxation of the stomach, and thus give tone to it in cases of debility in the same manner as tonics.

For internal use, *gallic acid*, *alum*, and *catechu* supersede all other astringents in the treatment of the dog.

For external application in lotions, washes, &c., *Goulard water*, the *chloride* and the *sulphate of zinc*.

CATHARTICS, or aperients, may be divided into four classes; namely,—

1. *Saline aperients*, often called cooling medicines, which act upon the whole intestinal canal, and if given in diluted doses with water, also act as diuretics; if given in very small doses, they have an excellent cooling and alterative effect in hot weather. The only saline purgative that need be used in the treatment of the dog is *Epsom salts*. To produce its full effect upon the bowels, 2 drachms

should be given: as a cooling alterative, give 6 grains every night.

2. *Cholagogues,* which have more or less effect upon the liver. Of these, the mercurial cathartics, as *calomel* and *blue pill,* are the most valuable; they stimulate the intestinal glands and the secretion of bile, besides having an effect on the kidneys and skin. The action of *aloes* on the liver is doubtful; it evacuates the lower intestines, and is a certain and useful drug. The dose for a dog is large; from 15 to 25 grains may be given with impunity.

3. *Purgatives,* which stimulate secretion, and accelerate evacuation; such as *rhubarb, senna, castor oil,* and *jalap.* Of these, the two first are too expensive to be much used in the treatment of the dog. Some other medicines of this class, such as *scammony* and *colocynth,* should be avoided as being too acrid for the irritable stomach of the dog. *Castor oil* is, on the whole, the most valuable purgative we possess; if given in moderate doses, it is safe and certain, and its efficiency can be increased in a certain ratio by increasing the quantity. It may be mixed with an equal proportion of syrup of rue, to prevent its causing vomiting: *Croton oil* need only be used in cases of urgent necessity.

Laxatives act very mildly upon the bowels. The only one that need ever be used for the dog is olive oil, in doses of two tablespoonfuls; fresh boiled vegetables and boiled liver have also a laxative effect.

Caustics are employed to destroy the vitality of the part to which they are applied. Of these, the most generally useful is *lunar caustic*; it is used to destroy morbid growths, ulcers, &c. In solution, it excites a healthy action in inflamed mucous surfaces; a milder caustic of similar virtue is the *sulphate of copper* or *bluestone*. *Caustic potash* is a very powerful agent, but must be used with the greatest caution, on account of its tendency to spread.

Depressants are medicines which have an exactly opposite effect to stimulants, hence they are used to reduce high febrile action. In the treatment of the dog there is no depressant more useful than *tartar emetic*, which produces nausea and depression of the system, in doses of ¼ grain. Diuretics, such as *nitre*, are usually combined with *tartar emetic* in the common fever medicines. *Digitalis* is a powerful depressant and diuretic in doses of from 1 to 2 grains.

Diaphoretics are medicines which increase the perspiration. The antimonial and the mercurial preparations, such as *tartar emetic* and *calomel*, have a diaphoretic effect upon the dog; *Dover's powder* is also an excellent medicine of this class. Diaphoretics are not much used in the kennel, owing to the great difficulty of inducing perspiration through the skin of the dog.

Diuretics are medicines which augment the secretion of urine. Many different medicines pro-

duce this effect, according to the state of the system at the time. Thus, in a healthy state, *nitre*, or the *saline purgatives* in small doses and much diluted, have a certain diuretic effect.

When the system is debilitated and the urine scanty in consequence, the use of *tonics* and *stimulants*, by stimulating the vital energies, and perhaps by promoting absorption, will act diuretically. Again, in inflammatory attacks, when the secretions are suspended, *depressants*, such as *tartar emetic* or *bleeding*, by lowering and restoring the natural state of the organs of the body, will bring the secretion of urine into a healthy condition.

Mercurial medicines have a direct effect upon the kidneys, and are diuretic in addition to their other powers.

On the whole, the most generally useful diuretic is *nitre*. It may be used in a dose of 5 or 6 grains, or as a slight diuretic and alterative in skin diseases, in doses of from 1 to 3 grains, in combination with sulphur.

EMETICS.—Those in commonest use are *tartar emetic* and the *sulphate of zinc*. A teaspoonful of *salt* and rather less of *mustard*, mixed in a small tumbler of lukewarm water, is a good emetic in an emergency. Emetics are of great use in emptying and thereby relieving the stomach. In some diseases of the biliary organs, such as the "Yellows," they are of the greatest value when given in an early stage of the attack.

NARCOTICS, or remedies which produce sleep.—The most important of these is *opium*, a drug peculiarly useful in canine diseases. In combination with astringents, it is used in nearly every variety of diarrhœa and dysentery; with ether, it forms the most valuable sedative and antispasmodic we possess. Solid opium and laudanum are the forms of this medicine chiefly used in the treatment of the dog. The *black drop* is an excellent preparation where the narcotic effect alone is required.

STIMULANTS are often of great use in cases of collapse, or of excessive debility following upon fevers, or profuse hæmorrhage, as in parturition, &c., where the debility is unaccompanied by fever. In such cases they supply the want of nervous force, and give time for the restoration of the other functions. Port or sherry is the best stimulant; but *spirits*, especially whiskey diluted with three or four parts of water, and in repeated doses of one or two teaspoonfuls, are also useful stimulants for the dog. In cases where alcohol is not advisable, *ammonia* may be used.

The action of stimulants and that of tonics are closely allied, and I know of no better distinction between them, than that the strengthening effects of stimulants are more transient, though more perceptible than those of tonics.

TONICS are medicines which gradually restore the strength of the body when weakened by disease. When prescribed in cases of debility, tonics give

a tone and energy to the stomach, increase the appetite, and facilitate digestion.

As tonics act by being assimilated, they require, in the case of the dog, to be given at short intervals —say every three or four hours. *Iron* acts as a tonic when there is a want of red blood, as evidenced by paleness of the lips and gums. It may then be given combined with *quinine* or *gentian*.

The most generally useful tonics for the dog are Peruvian bark, or its alkali quinine, and gentian. It is advisable in most cases to administer tonics in the form of pills, in combination with some carminative, such as ginger.

List of Drugs—their Action and Doses.

Aloes.—Purgative; acting on the lower intestines. From 15 to 30 grains (see Jalap).

Alum.—Astringent. 10 to 15 grains. Burnt alum, mixed with honey, a mild caustic applied to fungous growths.

Antimony, in the form of tartar emetic, is diaphoretic and depressant. 1 to 3 grains as an emetic; $\frac{1}{8}$ to $\frac{1}{2}$ a grain, often repeated, as a depressant and diaphoretic.

Areca Nut.—The best vermifuge, in doses of from 1 scruple to 2 drachms.

Arnica has the power of dispersing tumours and the effects of bruises, when applied in the form of tincture.

ARSENIC.—Alterative. 2 grains twice a day of Fowler's solution, cautiously increased.

BARK, PERUVIAN.—Tonic; astringent. Dose ½ to 1 drachm.

BLUE PILL acts on the liver in doses of 3 to 5 grains.

BUCKTHORN.—A cheap adjunct in the castor oil drench. From 2 to 3 drachms are purgative if given alone.

CALOMEL.—Never more than 3 grains: apt to salivate.

CANTHARIDES. (See BLISTERS.)

CASTOR OIL.—The safest purgative. 2 to 4 drachms.

CATECHU.—Astringent in diarrhœa, &c. 10 to 40 grains.

CHALK.—Astringent; antacid. Dose 10 to 20 grains.

CHLOROFORM.—Anodyne, when inhaled in dose of 15 to 20 grains.

COPPER, SULPHATE OF.—Used in the form of fine powder as a stimulant to ulcers, &c.

CREAM OF TARTAR.—An excellent cooling laxative and diuretic medicine for the dog, particularly for fox-hounds in summer. 5 to 8 grains every night.

CROTON OIL.—Purgative. Dose 1 drop. Should be mixed with linseed meal in a pill; only to be given in cases of urgent necessity.

DIGITALIS.—Sedative and diuretic. 1 to 2 grains: 6 grains will kill.

EPSOM SALTS.—Dose 1 to 3 drachms as a purgative: as an alterative 6 grains.

ERGOT OF RYE acts on the womb. Its value has been denied by Mayhew, and its action is undoubtedly very uncertain. Dose from 2 to 4 grains.

ETHER.—Antispasmodic. Dose ½ to 1 drachm.

ETHIOPS' MINERAL.—An excellent and safe mercurial preparation for the dog. As an alterative, from 3 to 5 grains.

FERN, MALE.—Vermifuge. From 2 to 4 grains of the powder may safely be given in cases of tapeworm.

GENTIAN.—Tonic and stomachic. 10 to 20 grains of the powder, or 3 to 8 grains of the extract, in debility following severe illness.

GINGER.—Cordial and carminative. The syrup of ginger is a useful adjunct to tonics, such as gentian, bark, &c. The powdered root may also be used in a pill.

GLASS, finely powdered.—Uncertain vermifuge. ½ drachm mixed with powdered ginger and lard into a pill.

IODINE.—Alterative, in doses of ¼ to 1 grain twice a day: also as an outward application to promote absorption and disperse glandular enlargements. The iodide of mercury is valuable in mange.

IRON.—A useful tonic, when the lips and tongue are pale, showing a want of red blood. Dose 10 to 15 grains of carbonate of iron.

JALAP.—A brisk purgative in doses of 10 to 20 grains. May be used to bring away worms. Also as an adjunct to aloes; 10 grains of jalap with 15 or 20 of aloes make a useful purgative, which acts along the whole extent of the intestinal canal.

JAMES's POWDER.—A good antimonial alterative, 3 grains twice a day.

MERCURIAL OINTMENT.—For mange, &c., mixed with lard.

MYRRH.—Antiseptic and astringent. Useful as a wash for ulcerated state of the mouth.

NITRATE OF SILVER (lunar caustic).—The best and safest caustic. May be used internally in chorea, in doses of $\frac{1}{8}$ grain.

NITRE.—Cooling diuretic, 8 grains: alterative, 2 grains every night.

OPIUM.—Narcotic. Dose from $\frac{1}{2}$ grain to 2 grains, according to size of dog.

PRUSSIC ACID.—To allay irritation in the skin, dilute a drachm of the *medicinal* acid in a pint of water.

QUININE.—Tonic. Dose 2 grains.

SALT.—An emetic, in doses of one teaspoonful in $\frac{1}{2}$ pint of water: as a vermifuge, put a teaspoonful in the mouth, and let it dissolve and be swallowed.

SARSAPARILLA.—Uncertain alterative, in doses of 1 drachm.

SULPHUR.—Laxative, in doses of 1 drachm. As

an alterative in skin diseases, it may be employed with nitre, in doses of 5 to 10 grains.

TURPENTINE.—Internally as a vermifuge. The so-called Venice turpentine, in the solid state, may be used in doses varying from 1 scruple to 2 drachms. It is safer, though far less effective, than the oil as a worm medicine, and may be used in combination with Areca-nut powder. The Venice turpentine usually sold by druggists is in reality resin, combined with oil of turpentine.

MODE OF GIVING MEDICINES.

When it is possible, the dog should have his medicine with his food, or the medicine may, if there is very little of it and the dog is hungry, be given wrapped up in a bit of meat; but sometimes this is not feasible, and the dog must have his medicine in a pill or bolus, or if this is impossible, he must be drenched.

To give a pill, sit down and take the dog between the knees, open his mouth by pressing the lips against the teeth, and let an assistant put the pill, well wrapped in silver paper, as far down the throat as he can. Keep the dog's mouth shut until he is seen to swallow, of which his licking his lips is a sure sign.

To give a drench, open the dog's mouth, as before, put the medicine in by spoonfuls, far back, shutting his mouth after each spoonful till he

swallows. With a very strong, resisting dog, an earthenware bottle, such as a ginger beer bottle, must be used instead of the spoon, and the animal's mouth held open by a cloth twisted round his upper jaw. A dog may also be made to take medicine, when it is in a liquid form, by closing his mouth with one hand, and drawing out the lips and cheek at the corner of the mouth, so as to form a little pouch, into which the medicine may be poured a little at a time. By this method he is not alarmed or flustered, but the operation is rather tedious.

A powder may be given in one or two ways; either it may be well mixed with butter, and then smeared, a little at a time, on the dog's nose, who will lick it off; or it may be mixed with an equal quantity of sugar, and put far back on his tongue, his mouth being forced open as in giving a pill; the sugar makes it taste less nauseous, and induces him to swallow it.

The stomach of the dog is so sensitive, that any irritating substance is seldom retained upon it; and after giving medicine it is the custom to chain up a dog in such a way that his head is kept raised from the ground for half an hour or so, to prevent him from vomiting; but this does not always succeed, and it is better to obviate the effects upon the stomach by giving the dog a short run out of doors after he has taken medicine.

Blisters and Liniments.

Before applying a blister, the hair should be cut off close to the skin, and, as blisters generally consist of deleterious substances, a wire muzzle should be put upon the dog.

An active blister for general use may be made of strong liquor of ammonia and camphorated spirits, of each 2 ounces, and powdered cantharides ½ ounce.

A quick and strong blister:—mustard 4 ounces, mixed thoroughly with cold water, strong liquor of ammonia ½ ounce, spirits of turpentine 1 ounce.

The blister may be applied in a sponge, held for ten minutes or longer to the place from which the hair has been cut.

Liniments are employed to obtain a milder counter irritant effect, in cases of strains, rheumatism, &c. An excellent liniment is formed of equal parts of laudanum, liquor of ammonia and spirits of turpentine. Liniments should be well rubbed into the skin with the hand.

Setons.

A fold of skin being taken up, a lancet is passed through, and a seton needle is pushed through the hole so formed and draws after it a piece of tape, which, if a powerful effect is to be produced, may be covered with a blistering ointment.

A common packing needle will answer the purpose of the seton needle, and a sharp penknife will do for the lancet, on an emergency.

Bleeding

May be performed in the neck-vein, in the ear, or the inside of the fore-arm, but bleeding in the neck-vein is preferable. A patch of hair being cut off on the left side of the windpipe, and a string tied rather tightly round the dog's neck, a longish cut must be made in the vein, which will then be felt to rise in the neck; care being taken to cut in the direction of the vein, and not across it. The opening made should be sufficiently large to admit of the free escape of the blood. In most cases, if it is advisable to bleed at all, it should be done till the dog reels from the loss of blood. This will generally take place after taking from 3 to 7 ounces, according to the size of the animal. A good general rule in bleeding is to take 1 ounce for every 3 lbs. of the dog's weight. When enough has been taken, the string should be untied, and either a small pin stuck across the edge of the wound, and a piece of coarse thread wound round the two ends, or two threads passed through the lips of the wound. In two or three days the cut is healed.

CHAPTER XVI.

FEVERS.

Distemper—Rheumatic Fever—Cold, or Common Fever.

DISTEMPER.

DISTEMPER is now invariably admitted to be similar in its symptoms to the epidemic continuous fever in human beings, known under the various names of typhus, nervous, gastric, inflammatory, or bilious fever, according to the different leading complications which distinguish it; and the discovery of this resemblance is of the greatest assistance in the successful treatment of the disease.

Definition.—A fever accompanied by extreme prostration of strength, with disturbance of all the functions, and a strong tendency to local complications, particularly to affections of the bowels, head or lungs.

Symptoms.—These sometimes come on suddenly, but are usually gradual and obscure. The first symptoms are invariably dulness, lassitude, disinclination for exercise, and loss of appetite. Then shivering, quickened pulse and hurried breathing, mark the low fever, which soon sets in; and in a few days the dog has quite lost his strength and

becomes rapidly emaciated. During this early period of the disease, there is often diarrhœa and vomiting, and generally a slight husky cough, and running at the eyes and nose; or sometimes there is a great diminution of the secretions. The symptoms of the approach of distemper are not, however, always so well marked as this, and often resemble those of a common cold, but in three or four days the true nature of the disease becomes evident.

Indications of local disease soon show themselves in the following parts:—

The Head.—When fits come on, it is a clear sign that either the substance or membrane of the brain is congested. These fits are marked either by an extreme degree of stupor, or by great violence when the substance itself of the brain is attacked, in which case the dog rarely recovers. The violence of the dog during these fits is sometimes so great as to be mistaken for hydrophobia, which, however, is never attended with the extreme emaciation which marks distemper. A constant symptom of congestion of the brain, whether slight or severe, is the bloodshot appearance of the eyes, and the heat of the whole head.

The Chest.—Hard, quick and difficult breathing; a short dry cough, accompanied by red-coloured mucous expectoration; bloodshoot eyes; high fever, and increased heat of surface, mark inflammation of the lungs. (See PNEUMONIA.)

The Bowels.—Inflammation of the bowels is attended by great thirst, intense heat and pain in the bowels, violent diarrhœa, and black fæces often tinged with blood and mucus. (See ENTERITIS.)

The Liver.—The existence of congestion of this organ is proved by the yellow colour of the eyes, and sometimes of the whole skin, and by the yellow ochre appearance of the fæces. (See HEPATITIS.)

The Skin is very frequently covered in distemper, usually in the latter stages, with a mangy eruption, or with distinct pustules on the belly or inside of the legs.

The Eyes.—Severe inflammation of the eyes is often a complication of the last stage of distemper. The proper treatment is described under the head OPHTHALMIA.

These local diseases may either appear singly, or any two or more may co-exist. In its regular course the disease increases in severity to the second or third week, when the dog recovers gradually, or sinks into a state of extreme prostration, from which he has not strength to rally and dies exhausted, or else the poison in the system is thrown off by the action of the kidneys or by the skin, and the symptoms then begin to amend. But the usual termination of the disease is in one of the local affections, which may, or may not, prove fatal.

Treatment.—I need not put the reader on his guard against any pretended specific for this common and much-dreaded disease. When the

complications are so various and so dangerous, it is obvious that no one remedy can avail, and success in coping with the disease is only to be obtained by a close observation of the symptoms as they present themselves, by the administration of appropriate remedies, and the greatest care in supporting the strength of the dog during the exhaustion which follows the abatement of the more violent symptoms.

During the first stage of the disease, the secretions are suspended or diminished, and the first object is to restore them to their proper condition. Give blue pill (dose 5 grains), followed in four or five hours by castor oil (1 tablespoonful). Let the castor oil be repeated on the next and following days, if the dog requires it.

When high fever sets in, the object will be to subdue it by lowering medicines. This will be best accomplished by giving tartar emetic (dose $\frac{1}{6}$ grain) every four hours; if constipation is present, give with it, each time, castor oil (dose 1 teaspoonful); and if this is rejected, give the emetic alone, and keep the bowels open by a daily injection of two tablespoonfuls of castor oil in $\frac{1}{2}$ a pint of lukewarm water.

Some practitioners recommend bleeding at this stage, and in many cases it is doubtless expedient; but if recourse is had to it, it must be with great caution, bearing in mind the tedious, exhausting nature of the disease. If the heaving at the flanks

is very great, the fever very high, the heat of the body great, the pulse quick, and the strength of the animal not much reduced, he may be bled. For this purpose he should be made to stand, or be supported in a standing position, and bled till he faints.

The different local diseases should be treated as they develope themselves. If there are symptoms of congestion of the *brain*, the head should be kept cool by frequent sponging with cold water, or iced water if it can be got, and from 2 to 4 ounces of blood should be taken from a vein on the inside of the ear. If there is great drowsiness, a strong blister may be placed on the top of the head. If there is much restlessness with affection of the head, give as an injection, 1 drachm of laudanum in ½ pint of thin starch or gruel. It must be borne in mind, that when distemper attacks the head, very prompt and active measures are required, as it is the most dangerous complication that can take place.

If the symptoms of inflammation of the *lungs* are very strong, recourse must be had to bleeding; if less marked, a blister should be placed on the chest, and cough medicines given as in *Pneumonia*.

In inflammation of the *bowels*, the treatment recommended under the head of this disease must be adopted. Diarrhœa, when unaccompanied by inflammation, may be relieved by a few small doses of castor oil, with ½ a teaspoonful of laudanum. Where castor oil is not advisable, give, at short in-

tervals, a tablespoonful of a mixture containing chalk 2 drachms, laudanum 6 drachms, gum-arabic 1 drachm, water 5 ounces. A warm linseed-meal poultice may be applied along the belly; and if the diarrhœa is very obstinate, an injection may be given, and repeated occasionally, composed of ½ pint of warm gruel and 1 drachm of laudanum.

When the dog's strength begins to fail, after the abatement of the more violent symptoms, his food, which should hitherto have been weak beef-tea or arrowroot, should consist of very strong beef-tea or arrowroot, with a dessert-spoonful of port wine in them, and should be given every two hours, and, if necessary, forced down his throat. If, however, there is still fever, the wine should be given cautiously; and if it is found to increase the fever, it must be discontinued. If port wine cannot be given, spirits and water may be used instead. It is not till the fever has entirely disappeared, that *tonics* should be given. The diet should then consist, as above, of strong broth, alternating with sago or arrowroot, and given every two or three hours; and three times a day he should have a tonic pill, for which the following is the receipt:—

Sulphate of quinine . . . . . 2 scruples.
Extract of gentian . . . . . 1 drachm.
Syrup of ginger, qu. suff.

Make into 20 pills.

Great care should be taken of the dog during convalescence, and he should not leave the house

till he has entirely recovered; relapses after distemper being very frequent. During his whole illness, he should be kept in a dry, warm, and comfortable place, and above all, should be treated with the greatest kindness and gentleness.

It has been for some time a disputed point whether *vaccination* is a preventive of the distemper. Judging by analogy, it certainly could not be expected that cowpox should act as a safeguard against distemper, a disease bearing not the slightest generic resemblance to it; and unfortunately this view of the matter has been completely borne out by experience. The inutility of vaccination for distemper would probably have been established long ago, but for the fact that the visitations of this disease are of an uncertain and partially epidemic character; passing by some kennels to attack others, and thereby falsifying the observations of some persons who have relied upon vaccination.

Inoculation can, however, be safely practised as a preventive, for distemper rarely attacks a dog twice. If a whole litter are inoculated, it is not likely that any will be lost, as the attack is generally slight; at all events, the loss of a puppy is small as compared with that of a grown dog. To inoculate for the distemper, insert a small feather into the nose of a diseased dog; then put it up the nose of each pup. All that will be required in the way of treatment, is to keep them warm and

feed them well. A slight cough and running at the nose is usually all the extent of the disease.

Rheumatic Fever.

Symptoms.—Shivering, more or less fever, and loss of spirits; the dog shrinks from the hand, and cries out if he is touched; the bowels are generally confined, and the urine scanty.

Treatment.—The disease usually yields to bleeding, a few doses of castor oil, and a warm bath, after which the dog should be thoroughly dried and kept warm, and an embrocation of equal parts of oil of turpentine, ammonia and laudanum rubbed into the skin daily. If the fever continues, give ½-grain doses of opium and calomel three times a day. When the fever has disappeared, stop this medicine, and give 1 grain of quinine morning and evening.

Cold or Common Fever.

The dog is not very liable to cold, notwithstanding the alternations of heat and cold, and dryness and wet to which he is subjected.

Symptoms.—Dulness, slight shivering, and a hot nose, are the symptoms of a very mild attack; in a more severe form of cold, the fever is more marked, a slight cough is often present, there is a running at the nose, and the secretions generally are scanty.

Treatment.—The treatment will vary with the severity of the symptoms. In a slight case, it will be enough to see that the dog is comfortably and warmly lodged, and, if necessary, to give him a gentle purgative, such as a tablespoonful of castor oil.

If the liver and kidneys are not acting, give 5 grains of blue pill, followed in eight hours by Epsom salts (dose 2 drachms); and night and morning 2 grains of Epsom salts with 8 grains of nitre as a drench, much diluted.

If the cough is very troublesome, it may be necessary to give a teaspoonful of equal parts of paregoric elixir, "Black drop" and four parts of syrup every four hours: in this case the drench of Epsom salts and nitre need only be given at night.

If the strength is much reduced when the attack is over, it may be advisable to give a tonic. It should only be begun when the cough has entirely disappeared. The tonic used may be the one recommended in recovery from distemper (see p. 184).

It should be remembered that the beginning of distemper much resembles that of common cold, and that, if neglected, cold is apt to turn into distemper. The treatment I have recommended in the first stage of cold, will be equally applicable to the commencement of distemper.

CHAPTER XVII.

DISEASES OF THE INTERNAL ORGANS.

Pleurisy—Pneumonia—Bronchitis—Asthma—Enteritis—Hepatitis—Inflammation of the Bladder—Colic—Diarrhœa—Constipation—Indigestion—Dropsy.

Pleurisy and Pneumonia.

Pleurisy is inflammation of the membrane lining the lungs and chest: *Pneumonia*, an inflammation of the substance of the lungs themselves. As these two diseases may easily be mistaken for each other, and the treatment proper to each is widely different, I shall follow the example of Youatt, Stonehenge, and other recent authors, in abridging the excellent comparative table, drawn up by Monsieur Delafond of Alfort, of both the chronic and acute forms of the two diseases.

Acute Pleurisy.	Acute Pneumonia.
Symptoms.—Shivering, usually accompanied by slight colicky pains, and followed by general or partial sweating. Inspiration always short, unequal and interrupted; expiration full; air expired of the natural	*Symptoms.*—General shivering, rarely accompanied by colicky pains, followed by partial sweats at the flanks and inside of the thighs. Inspiration full; expiration short; air expired hot. Cough frequently

Acute Pleurisy.	Acute Pneumonia.
temperature. Cough unfrequent, faint, short, and without expectoration. Artery full. Pulse quick, small, and wiry.	followed by slight discharge of red-coloured mucus. Artery full. Pulse accelerated, strong, full, and soft. On percussion, a dull sound is returned from the congested parts, produced by thickening of the substance of the lungs, from congestion.
Chronic Pleurisy.	Chronic Pneumonia.
Symptoms.—Inspiration always deep; expiration short. Cough dry, with expectoration, frequent or capricious. Absence of complete respiratory murmur in the inferior portion of the chest.	*Symptoms.*—Inspiration and expiration quick, painful, and interrupted. Cough unfrequent and suppressed; no expectoration.

Treatment of acute Pleurisy.—Feed on a low diet of gruel, &c.; bleed copiously at once; keep the bowels open with doses of castor oil, and administer tartar emetic in doses of a $\frac{1}{4}$ of a grain every one or two hours. If the fever is not abated by this treatment, combine a $\frac{1}{4}$ of a grain of calomel with each dose of tartar emetic.

Treatment of acute Pneumonia.—Feed on a low diet. If the dog is strong and the fever is high, bleed at the beginning of the attack; if he is at all weakly, and the fever seems to be of a low kind, bleeding must be avoided, and a blister should be rubbed into the dog's chest, composed of equal parts

of cantharides, oil of turpentine and lard. The dog should at once have a dose of castor oil, followed by ¼ grain of tartar emetic every three or four hours, increasing the dose if the fever does not abate. The termination of this active disease, when the inflammatory fever has passed away, is frequently in low fever, with great prostration; in which case the dog's strength must be supported by strong broth, given often, and with a teaspoonful of brandy or wine in it.

Treatment of chronic Pleurisy.—The treatment for the chronic form should be less active, but similar to that of acute pleurisy. Support the strength by nourishing broths, &c., but without any solid food.

Treatment of chronic Pneumonia.—Instead of the blister, recommended in the acute form of the disease, put a strong mustard plaster on the chest, from which the hair should be cut off with a pair of scissors. Bleeding is seldom necessary. In other respects, the treatment for acute pneumonia may be followed. The diet should consist of sago, gruel, or sopped bread. If the dog seems sinking, he may have a little broth, and an occasional spoonful of port wine and water.

These diseases are often complicated with each other, and very many cases of pneumonia become connected with, or terminate in pleurisy.

Bronchitis.

A disease similar to bronchitis in man is spoken of by some veterinary surgeons. I have never seen this disease in a separate and distinct form, but congestion or inflammation of the tracheal or bronchial mucous membrane is by no means an uncommon complication of pneumonia. The treatment recommended for that disease, would be equally applicable to a case of bronchitis in a distinct form.

Asthma.

Asthma attacks old, over-fed, or worn-out animals; and being a disease mainly caused by want of power and complicated with a mangy, scrofulous state of the system, is capable of mitigation rather than of entire cure.

Symptoms.—Asthmatic breathing occurring in fits; the dog is slothful and dull. The appetite is not much affected; there is no fever; the coat is often ragged, showing the presence of mange of some kind.

Treatment.—The objects of the treatment are twofold:—1st, to relieve the urgent symptoms; and 2nd, to improve the health and remove the exciting causes.

When the dog is comparatively strong, he may have an emetic at the beginning of the attack (dose 2 grains of tartar emetic); but in the case

of an old, feeble dog, this treatment would be too lowering.

During the asthmatic fit, give a teaspoonful of equal parts sulphuric ether and laudanum, and four parts syrup. If the dog is very weakly, it is advisable to repeat this medicine at intervals of three or four hours throughout the day.

A liniment composed of 5 parts mustard and 2 parts spirits of turpentine, may be rubbed into the chest.

The general health must be attended to by keeping the bowels open by the use of castor oil or aloes (dose 20 grains every night), and by giving a reduced diet, consisting of potatoes, bread, or oatmeal-porridge, with only very little meat. The dog should be fed twice a day.

Husk.

A complaint which I do not remember to have seen described in any work on the diseases of the dog is known by this name to London dog-fanciers. It is common and very troublesome, and is said to be contagious.

Symptoms.—A husky choking cough, which is only relieved for the time when the dog has coughed up a portion of frothy mucus, which seems to be the cause of the cough itself. There is no fever or dryness of the nose, or thirst, but the dog gets perceptibly thinner when the disease has been on him for any time.

Treatment.—I have found the following treatment specific in every case. After getting the bowels into a healthy state, give two drops of the solution of the chloride of arsenic twice a day *with* the food, increasing the quantity gradually to three, and afterwards to four drops. The dog should be fed moderately twice a day, and have regular exercise. This treatment has often to be continued for some weeks.

Hepatitis—Inflammation of the Liver, or the Yellows.

Symptoms.—Sickness, thirst, shivering and fever; the whites of the eyes, the gums and lips, and sometimes the skin generally, become yellow, as in the case of jaundice in man; constipation, or diarrhœa; the fæces clay-coloured, showing a want of bile in the intestines.

Treatment.—If the disease is taken in its early stage, before much fever has set in, there is no treatment so efficacious as an emetic (2 grains of tartar emetic in a tablespoonful of warm water, followed by drenches of lukewarm water till the effect is produced). In any case the dog should have a pill containing 3 grains of blue pill with 1 grain of opium, every five or six hours. If diarrhœa is produced by this treatment, the quantity of opium must be increased, and the mercury, if necessary, reduced to 2 grains. The

diet should consist of gruel, sago, &c. Castor oil should be given every morning, if the state of the bowels seems to require it, in doses of 1 tablespoonful. An embrocation, consisting of 3 tablespoonfuls of mustard and 1 tablespoonful of oil of turpentine, should be rubbed in over the liver. In severe cases, bleeding should be resorted to as soon as possible. Tonics should be given when the dog is recovering. (See receipt for TONIC PILLS, p. 184.)

Chronic Inflammation of the Liver.—Symptoms. Loss of spirits; gradual, and finally extreme emaciation; enlargement of the liver, and great distension of the belly; the fæces show, by their pale clay-colour, the absence of bile; the coat staring, sometimes coming off in patches.

Treatment.—Give 2 grains of blue pill every five or six hours, continued till the mouth is sore—a sign that the system is saturated with the drug. The dog must have a farinaceous diet with broth. Occasional doses of castor oil are necessary, if there is constipation. If the bowels are acted upon by the blue pill, 1 grain of opium may be combined with it. Mercurial ointment should be rubbed daily into the side, over the liver. If the strength is much impaired, and there is little appetite, gentian can be given, either alone, or combined with iron if the tongue and lips are pale (carbonate of iron, 10 grains; extract of gentian, 5 to 8 grains; given twice a day).

COLIC.

Description.—Spasms of the coats of the bowels, attended by fits of intense pain.

Symptoms.—The attack comes on suddenly; at first the dog gives a short cry at intervals; this cry generally changes to a prolonged howl, as the fits of pain become severer and of longer duration. The nose is usually cool and moist, the eye not red, and nothing in the appearance of the animal would lead one to suspect mischief. The attitude during the fits is peculiar; the back being arched, the legs drawn together, and the tail pressed between the legs.

Treatment.—Give, as an injection, 2 tablespoonfuls of the following mixture: ether 3 parts, laudanum 2 parts, water 10 parts, followed by a hot bath, in which the dog should remain for a quarter of an hour. He should be dried hastily and wrapped in a blanket, and at intervals of an hour should have a dose of ½ drachm of laudanum and 20 drops of ether, mixed with a tablespoonful of water, till the fits of pain are less severe, when the doses should be given at longer intervals and gradually stopped. When the attack is very sharp, the quantity of laudanum in the doses and injection should be increased, and the dog may have a second injection of laudanum and ether.

In ordinary attacks of colic, a warm bath with the doses of laudanum and ether mentioned above,

will usually effect a cure. When the fit is sharp, great relief is afforded by causing the dog to inhale 10 or 20 drops of chloroform on a handkerchief.

Colic is often accompanied by obstinate constipation, in which case a tablespoonful of castor oil should be administered; or, if this is ineffectual in giving relief, twice the quantity of castor oil may be given as an injection, in ¼ pint of thin gruel.

Enteritis, or Inflammation of the Bowels.

Symptoms.—Resemble those of colic in some respects, but as the treatment proper to each disease is different, it is important to distinguish them. This disease is preceded by general feverishness, a dry nose, coldness of the extremities, great thirst and loss of appetite, shivering fits, and a quick hard pulse. The back is arched, and the legs drawn together, as in colic. The cries of the dog during an attack of inflammation are sharper and shorter, being less of the nature of a long howl, than in the case of simple colic. This symptom I have rarely mistaken; and I have on several occasions been enabled to distinguish the disease by the nature of the cry alone. There is usually much constipation, and an evident increase of pain is produced by gentle pressure on the bowels, whereas in colic the pain is often relieved by pressure. Inflammation of the bowels is sometimes the con-

sequence of a neglected case of colic, and the two diseases are often complicated with each other.

Treatment.—This is one of the most fatal diseases to which the dog is subject, and the treatment, to be successful, should be prompt and active. Blood-letting must be resorted to; and leeches (from 6 to 12) may with advantage be applied on the seat of the pain, and the dog immediately afterwards placed in a warm bath, to encourage the bleeding—taking care that this is not carried too far. When he is in the bath, administer a desertspoonful of a mixture of equal parts of laudanum and ether, with 10 parts of water, and continue it at intervals of ½ an hour, while the cries last.

It is absolutely necessary to administer mercury in some form in Enteritis, but the irritating effects of this drug upon the then inflamed surface of the bowels, must be obviated as much as possible, by giving the drug in the mildest form and smallest possible doses. It will therefore be advisable to give 5 grains of grey powder, with 1 grain of opium, at intervals of 5 hours; and, when the more urgent symptoms are mitigated, a full dose of castor oil may be given.

It is due to the reader to state that so high an authority as Professor Spooner is opposed to the exhibition of mercury in Enteritis in the dog.

Feed during recovery on beef-tea and boiled rice.

Diarrhœa.

There are many sorts of diarrhœa in the dog, each of which requires a different treatment. A broad distinction may be made into acute and chronic diarrhœa.

Simple Diarrhœa.—Symptoms. Looseness of the bowels, without sickness or the discharge of mucus.

Treatment.—In slight cases, the dog need have no medicine for a couple of days. If the complaint does not then stop, give a tablespoonful of castor oil, with from 10 to 15 drops of laudanum.

Acute Diarrhœa.—Symptoms. Great looseness of the bowels, with copious discharges of mucus. Sickness often precedes or accompanies the disease. There is little or no fever, but considerable thirst; and no pain on pressure being applied to the abdomen.

Treatment.—A large tablespoonful of castor oil with from 20 to 30 drops of laudanum. The dog should have food from which all solid or irritating matters are excluded, such as well-boiled gruel or rice, and milk. If this treatment does not succeed, which it does in nine cases out of ten, give from 5 to 15 grains of the compound powder of chalk with opium, three times a day. If the disease still continue, add to the powder ½ grain of opium and 10 grains of catechu.

Chronic Diarrhœa.—Treatment. This disease is produced by a congested state of the mucous mem-

brane; and the treatment should be directed to removing that congestion, which can best be done by giving very small doses of mercurial preparation, to act upon the liver, which is generally the seat of the disease. Give, during two days, 2 grains of grey powder with 10 drops of laudanum, every four hours; then give the chalk mixture as above, three times a day. Great caution must be used in giving the grey powder; if it is observed to irritate the bowels, as evidenced by an aggravation of the diarrhœa, it should be immediately stopped for a time, and the use of chalk and opium alone persevered in. If these fail, recourse may be had to catechu and opium (dose, catechu ½ drachm, opium 1 grain, three times a day). Feed, during the attack, on beef-tea and boiled rice.

Dysenteric Diarrhœa.—Symptoms. Looseness of the bowels, with scanty evacuations of a gelatinous substance, resembling white of egg, or of mucus mixed with blood, or of blood alone. There is often much fever and, apparently, severe griping pains. The disease is apt to become chronic.

Treatment.—In every case the contents of the bowels must be removed by two or three full doses of castor oil with opium (dose, 1 tablespoonful of castor oil, 30 drops of laudanum, once a day). No solid food should be given; and, if the strength is failing, the food should be administered every two or three hours, and a little wine mixed with it occasionally. In severe cases, injections of gruel and

laudanum are advisable (gruel ¼ pint, laudanum 50 drops); and leeches should be applied to the abdomen.

Unless the liver is affected, this treatment will generally succeed; and it can be ascertained whether the liver is in fault, by evidence of pain when the region of the liver is pressed, and by the clayey appearance of the fæces. Where the liver is affected, grey powder must be given in 1 grain doses, three times a day. In cases of long-continued dysenteric diarrhœa, tonics, such as quinine, and strong astringents, such as catechu or chalk, should be given.

Inflammation of the Bladder.

Symptoms.—Pain on the application of pressure over the region of the bladder. The urine is discharged in small quantities and with apparent pain. The pain and inflammation frequently extend to the urethra.

Causes.—Exposure to cold and wet; a blow; the injudicious use of aphrodisiacs, such as cantharides, in the case of the bitch; and, perhaps, the presence of stones in the bladder.

Treatment.—Diuretics, such as nitre, though often employed and recommended, should be strictly avoided. Give a purgative every morning, of equal parts of castor oil and olive oil, and use once a day an enema of ¼ to ½ pint of starch, or thin and well-boiled gruel. Give every night a ball containing—

Mindererus' spirit (Liq. Amm. Acet.)	3 drachms.
Dover's powder	3 grains.
Black drop	8 drops.

If there is much fever and the strength is not reduced, bleed freely.

In cases of simple debility with incontinence of urine use astringent tonics, such as a decoction of oak bark and Peruvian bark, ½ drachm of each in a pint of water; dose ¼ of a pint night and morning.

Constipation

Is the result of neglect. If the dog's food is not sufficiently varied, and proper means of exercise denied him, the consequence is sure to be constipation, which often assumes a troublesome, and sometimes a dangerous form. In an ordinary case, the removal of the cause effects a cure and prevents a return of the disease. The dog should have green food every other or third day, and well-boiled oatmeal porridge daily, and an occasional meal of boiled liver. Plenty of exercise is indispensable. This treatment may be preceded by a dose of castor oil, or he may have every morning a tablespoonful containing 2 parts of olive oil and 1 part of castor oil.

If the belly of the dog is much distended, and he is uneasy, or in great pain, no time should be lost in giving repeated injections of warm water,

combined with castor oil (in the proportion of 2 tablespoonfuls to ½ pint of water) till an effect is produced. A full dose of castor oil (1 tablespoonful) should be administered at the same time.

INDIGESTION.

Symptoms.—Many forms of disease can be traced to indigestion, which itself arises from want of exercise, irregular or over feeding, or all three causes combined. The symptoms therefore are very various. Sometimes the animal becomes excessively fat, loses his spirits, gets irritable and snappish, his gums become inflamed and his breath offensive; sometimes he is afflicted with asthma, and a hollow cough. Some form of mange is a common secondary symptom. The preliminary symptoms, however, are invariably a loss of appetite for wholesome food, generally accompanied with thirst, and sometimes with sickness; there is often diarrhœa, and very often more or less inflation of the stomach.

Treatment.—The treatment will depend upon the symptoms, and upon the causes which have led to the disease. Where the dog has been obviously overfed, and there is no appetite for common food, the treatment should commence by starving him for twenty-four hours. The food, which should consist of small quantities of bread and boiled rice, and a very little meat, must be given at regular

hours, either once or twice a day, according as the dog is weakly or the contrary. (See directions for feeding, p. 105.)

If there is constipation or diarrhœa, these symptoms must be relieved; the first, by small doses of castor oil and olive oil (see CONSTIPATION), and the use of boiled vegetables in the food; the second, by feeding on thick rice water and beef-tea, if possible avoiding any medicine. (See DIARRHŒA, p. 198.)

When the bowels are in good order, use the following remedy:—

Powdered rhubarb . . . . . 1 scruple.
Extract of gentian . . . . . 2 scruples.
Powdered capsicum . . . . . 1 scruple.

Make into 16 pills, and give one before feeding.

If there is distension of the stomach, add to the above formula—

Carbonate of soda . . . . . ½ ounce.

If the liver is deranged, give 3 grains of blue pill at night, with a tablespoonful of castor oil in the morning.

There is occasionally constant and troublesome sickness. This symptom often disappears under the treatment I have recommended above.

With this treatment combine a very cold bath every morning before the dog is fed. He should be rubbed very dry after it, and have a run out immediately, if the weather allows it.

In some cases of indigestion, I have found that tartar emetic, in doses of $\frac{1}{10}$ or even $\frac{1}{16}$ of a grain

twice a day, put dry upon the tongue, has a good effect in restoring the powers of the stomach.

Dropsy.

Dropsy is the name given to the swelling caused by the effusion of serum (the watery part of the blood) into the cellular tissues of the body. In the dog, this swelling is usually seen in the belly. Sometimes, especially in old dogs, the skin of the whole body, and especially of the legs, is distended with serous fluid. . . . .

Symptoms.—Dropsy is scarcely likely to be mistaken for anything else than excessive fatness, or pregnancy; from fatness it may be distinguished by the want of flesh in the rest of the body; from pregnancy, by there being no enlargement of the teats in dropsy; and from both these states, by the fact that the presence of water can be detected, by placing one hand on the side of the belly, and striking the opposite side gently with the other hand, when a fluctuating and undulating movement may be perceived.

The symptoms of general dropsy are, the *pitting* of the skin, that is to say, that, upon the finger being pressed against it, the part feels puffy, and the place touched by the finger remains depressed for a time, not regaining its natural form as usual. Dropsy is accompanied with more or less ill health, great thirst, want of appetite, &c.; sometimes

mange, piles, &c. There is always debility, fatigue on the slightest exertion, a quick, feeble pulse, and paleness of the lips and gums.

Treatment.—Dropsy may be the result either of inflammation, of great debility, or of some organic mischief—such as disease of the kidneys—by which the condition of the blood itself is altered.

If there is fever, which is seldom the case, the remedies for dropsy will be bleeding, and the use of tartar emetic as a depressant, in doses of $\frac{1}{8}$ grain, combined with 4 grains of nitre and $\frac{1}{2}$ grain of digitalis, twice or three times a day; and occasional doses of Epsom salts.

Where there is debility, the dropsical effusion can be diminished, by cautiously giving diuretics and mild saline purgatives; the doses being regulated by the strength of the dog. In cases of debility, Epsom salts will act both as a gentle purgative and diuretic, if given in doses of 1 drachm, much diluted with water, twice a day. To increase its diuretic effect, 4 grains of nitre may be combined with it. With this treatment a tonic may be given, night and morning, composed of—

Carbonate of iron	10 grains.
Quinine	2 grains.
Powdered ginger	5 grains.

"Tapping" should only be resorted to when the disease has extended so far that the breathing and circulation are impeded. An incision being made half-way between the navel and pubis on the line

which runs along the middle of the belly, called the *linea alba*, an instrument called a trocar is then introduced, and the fluid allowed to escape; taking great care that the instrument does not wound the intestines. A broad bandage is then applied round the belly, and left on for five days.

If dropsy is complicated with any organic disease, such as disease of the kidneys, the case may at once be pronounced desperate, and the remedies I have recommended would be useless, and the giving of diuretics worse than useless.

CHAPTER XVIII.

DISEASES OF THE EAR, MOUTH, EYE, AND SKIN.

Canker of the Ear—Canker of the Mouth—Blain—Ophthalmia—Cataract—Amaurosis—Mange.

CANKER OF THE EAR.

Definition.—An inflammation of the membrane lining the ear.

Symptoms.—The dog is continually trying to scratch his ear, and flapping it violently against his head. The inside of the ear is inflamed and red, and the tips are generally slightly thickened and ulcerated; though canker often exists without this symptom, which is the effect of the constant shaking of the dog's head. Nevertheless this symptom is sometimes mistaken for the cause of the canker itself; and the ears have often been cut shorter, to the aggravation of the disease, for the purpose of effecting a cure. If canker is of long standing, abscesses form in the ear; there is a dark-coloured discharge from the interior, and often a general thickening of the whole ear.

Treatment.—Feed the dog on a vegetable diet only, give a dose of castor oil, and three times a

day use a lotion composed of 1 part goulard water and four parts water. Two persons are required to apply the lotion properly; one, to hold the ear and keep the dog steady, and the other to pour in the lotion, which should be allowed to sink well into the passage of the ear. After this, let a cap be placed on the dog's head, which may be made thus: take a piece of thin calico, of an oblong square shape, and large enough to cover the whole of both ears; along each of the two longest sides, sew a piece of tape, having ends about 4 inches in length, with which the cap can be securely tied on below the dog's head. The object of this cap is to prevent the flapping of the ears. If made of sufficiently thin material, and if it does not press on the ears, it will not increase the inflammation, as it has been said to do.

Abscesses must be lanced, and care taken that no matter is left in them; after the operation, lint soaked in the lotion may be put for a day or two in the seat of the abscess, and the ear may then be left to heal of itself.

Canker of the Mouth.

Definition.—This disease attacks old, or highly petted dogs. Such dogs lose many of their teeth, while the others become loose and useless to them; the stumps and loose teeth then act as foreign bodies, and inflame the gums; the inflammation

soon extends to suppuration, and the state of things ensues which is sometimes called canker of the mouth.

Symptoms.—At first, redness and soreness of the gums and lips, the teeth are covered with tartar, the gums become so tender that the dog is afraid either to eat or drink, the gums bleed, and the breath is very offensive.

Treatment.—It is best to begin by lowering the dog's system by a course of active aperients. Give a bolus, containing calomel 2 grains, aloes 15 or 20 grains, every other night for three or four days. If the dog is weakly and low in flesh, a few doses of castor oil will do instead. All the loose teeth must then be carefully extracted, the tartar removed from those that are firm, and the mouth well washed with dilute chlorinated soda applied with a piece of sponge tied on the end of a small stick. After the first week, a lotion composed of equal parts of tincture of myrrh and water may be substituted for the chlorinated soda. If tartar still forms on the teeth, when the tenderness of the mouth has disappeared, clean the teeth occasionally with a tooth-brush dipped in chlorinated soda.

Blain.

Definition.—An enlargement or swelling under the tongue.

Treatment.—Cut the swelling open, and if it does

not heal rapidly, wash the mouth with diluted chlorinated soda.

OPHTHALMIA.

Symptoms.—The white of the eye becomes highly bloodshot, the eyelids are swollen, and glued together with the discharge from the eyes; there is occasionally a good deal of fever and heat in the head, &c. This disease often follows a bad cold, or exposure to wet.

Treatment.—If there is much inflammation in the eye, bleed the dog freely; or, if there is less fever, and the dog is worth the trouble, apply one or two leeches above the eye, pricking the place slightly, to induce the leech to bite in the right spot. If the disease accompanies a cold, which it often does, the dog should be fed on bread and milk, or slops of any kind; and should have from the first occasional doses of castor oil. The eye should be gently fomented with a sponge three or four times a day, using warm water, or a decoction of poppies. When the discharge is thick, the eyelids of the dog are glued together during the night, which irritates the eye, and causes the dog to make matters worse by rubbing it with his paws. This sticking together of the lids may be prevented by placing a small piece of spermaceti between them the last thing at night. When the inflammation abates, instead of the fomentation, a wash for the eye may be used

consisting of nitrate of silver 2 grains, water 1 ounce.

Another and totally distinct kind of ophthalmia exists, for which I am at a loss for a name, and of which I shall proceed to describe the

Symptoms.—A slight redness of the whites of both eyes, with inflammation of the lids; pustules, terminating in very small ulcers, form round the ball of the eye; there is no thick discharge as in common ophthalmia, but the eye waters copiously, particularly when it is touched or examined.

Treatment.—As this disease is often accompanied by a mangy, or rather scrofulous condition of the dog's system, attention must be directed to this point (see MANGE, p. 212). Foment the eye with a warm decoction of poppies, and place a small piece of citrine ointment between the lids at night. Ulcers on the cornea should be touched with lunar caustic; but this must be done with great care, and in doing it, one person should hold the dog's head steadily on a table. The dog should have the tonic pill described at p. 184 night and morning.

CATARACT

Is a whitish opake spot on the ball of the eye, which gradually becomes larger and ends in blindness. I am not aware of any cure.

Amaurosis,

Or nerve-blindness, answers to *gutta serena* in the human subject. The eyes increase slightly in size, the pupil is clear and bright, and the sight is not always entirely lost. There is no cure.

Mange.

The treatment of mange is attempted, even by unprofessional persons, without the slightest hesitation. It is, nevertheless, by no means easy. The great variety of skin disease in the dog, the minute differences between many of their forms, and the little amount of scientific attention which has been bestowed upon the subject, combine to render it very difficult, even for the professional, to know what treatment to employ in all cases. Without attempting an accurate classification of the varieties of mange, I shall lay down some general rules for the treatment of all diseases of the skin.

Most of these diseases require a constitutional as well as local treatment. In all cases the bowels should be kept open; and if the liver is judged, by the appearance of the fæces, to be inactive, small doses of mercurial medicine can be given with advantage.

There is one class of skin disease produced by debility of the system; the dog is weakly, there is

no inflammation, little or no irritation in the skin, and the hair gets thin or falls off in patches.

Treatment.—Give daily a pill containing powdered gentian 15 grains, ginger 4 grains. Gradually improve the food if it has been deficient, giving a diet of two parts of vegetable and one of animal food, and feeding at regular hours; and rub into the roots of the hair an ointment composed of sulphur 2 ounces, spirits of turpentine 1 ounce, lard 8 ounces.

In another class of skin disease, there is a red eruptive appearance, first breaking out in irregularly round patches on the legs and breast, and spreading to the back and sides. There is seldom much general inflammation, or at first much itching. The hair does not fall off, but after a time is rubbed off in places, by the dog himself.

Treatment.—Lower the diet, giving potatoes and green vegetables instead of oatmeal or meat. Let the dog have regular exercise; and give him every morning 3 grains of blue pill, followed in four hours by a large dose of castor oil. No local application is necessary, but the dog may be well washed occasionally with soft soap and water, taking care that he is well dried, as the mercury might make him likely to take cold.

If this kind of mange is neglected, it speedily assumes a more severe form; the patches increase in size and spread rapidly, the itching becomes intolerable, and there is considerable inflammation of

the whole system. Under these circumstances, bleeding is sometimes necessary, or tartar emetic may be given in doses of $\frac{1}{8}$ grain, three times a day. If the irritation of the skin is very great, a lotion may be applied, with great caution, consisting of 2 fluid drachms of dilute prussic acid in a pint of water.

These forms of skin disease are usually seen in over-fed house dogs, who have not enough exercise; consequently a proper diet and sufficient exercise should be principally relied on to effect a cure.

Another class is also produced by injudicious feeding and want of exercise: round patches of hair are matted together by a kind of scab, which in time falls off, bringing the hair with it. This variety is well known as blotch.

Treatment.—A low diet and regular exercise; give daily a bolus composed of aloes 15 grains, Castille soap 10 grains; and every morning from 10 to 15 grains of polychrest salt (potassæ sulphas).

An aggravated form of this class of disease is where the skin gets thickened and covered with scabs and blotches, which have an offensive discharge. The dog becomes bloated, loses his appetite and spirits, and is tormented by a perpetual itching.

Treatment.—Give for three days every morning a bolus containing—

Blue pill	5 grains,
Aloes	15 grains,
Jalap	8 grains,

leaving out the jalap after the first morning if the bowels are too much acted upon. A very low diet, without any meat, must be given. Continue the 5 grains of blue pill alone, followed, if required, by small doses of castor oil. When the bowels are in good order, and the appearances of the fæces show that the liver is acting properly, leave off the blue pill, and give, night and morning, 2 drops of Liquor arsenicalis with the food, increasing the dose to 4 drops at the end of three days, and to 5 drops at the end of a week. This treatment should be continued for at least one or two months; the animal being occasionally rubbed with equal parts of oil of turpentine and sulphur, and 2 parts of train oil.

Another very distinct kind of mange is produced by a microscopic insect. The hair comes off in large patches, principally on the back and neck, and round the eyes; in some cases the dog becomes almost bare. The skin is dry, hot, wrinkled and scaly. The appetite generally continues good, but there is a great deal of thirst and some fever. The dog is continually scratching himself, and rubbing against the furniture, if he is kept in the house.

Treatment.—The old-fashioned sulphur treatment, if properly followed, is generally specific. Give small doses of sulphur (5 grains) three times

a day, and rub into the skin equal parts of lard and sulphur. This operation should be performed before a fire, to make the ointment flow, and the whole skin should be thoroughly saturated. Four or five applications, at intervals of three days, are usually enough to cure the disease. The skin should be well washed each time before the ointment is applied. In a very severe case, the dog may be bled, and the ointment of iodide of mercury rubbed in; the dog's bowels being kept open, if necessary, with castor oil.

When changing their coats, dogs are liable to a slight eruption, appearing in circular spots on the legs and breast. If neglected, it may turn to some form of mange, and should therefore be attended to. I have not found the internal use of sulphur of much value. As this eruption only occurs at a time when the dog's system is slightly debilitated by the act of changing the coat, tonics are beneficial. Give, every night, a pill consisting of—

Quinine	1 grain,
Powdered gentian	10 grains,
Powdered ginger	5 grains,

and rub a little of the iodide ointment upon the mangy spots.

CHAPTER XIX.

NERVOUS DISEASES.

Hydrophobia—Epileptic Fits—Teething Fits—Fits from Worms—Apoplectic Fits—Sucking Fits—Fits from Distemper—Chorea—Palsy—Kennel Lameness—Palsy in the Back.

HYDROPHOBIA.

THIS malady is quite incurable, though scarcely a month passes without some paragraph going the round of the newspapers, detailing the discovery of a new pretended specific. The disease is exceedingly rare, and I myself freely confess that I have never seen a case which I could satisfy myself was real hydrophobia. As the recognition of the true symptoms is the only important point about the disease, I shall quote the excellent description of them by Youatt:—

"Much has been said of the profuse discharge of saliva from the mouth of the rabid dog. It is an undoubted fact that, in this disease, all the glands concerned in the secretion of saliva become increased in bulk and vascularity. The sublingual glands wear an evident character of inflammation; but it never equals the increased discharge that accompanies epilepsy or nausea. The frothy spume at the corner of the mouth, is not for a moment to

be compared with that which is evident enough in both of these affections. It is a symptom of short duration, and seldom lasts longer than twelve hours. The stories that are told of the mad dog covered with froth are altogether fabulous. The dog recovering from, or attacked by a fit, may be seen in this state, but not the rabid dog. Fits are often mistaken for rabies, and hence the delusion.

"The increased secretion of saliva soon passes away. It lessens in quantity; it becomes thicker, viscid, adhesive, and glutinous. It clings to the corners of the mouth, and probably more annoyingly so to the membrane of the fauces. The human being is sadly distressed by it; he forces it out with the greatest violence, or utters the falsely supposed bark of a dog, in his attempts to force it from his mouth. This symptom occurs in the human being, when the disease is fully established, or at a late period of it. The dog furiously attempts to detach it with his paws.

"It is an early symptom in the dog, and it can scarcely be mistaken in him. When he is fighting with his paws at the corners of his mouth, let no one suppose that a bone is sticking in the poor fellow's teeth, nor should any useless and dangerous effort be made to relieve him. If all this uneasiness arose from a bone in the mouth, the mouth would continue permanently open instead of closing when the animal for a moment discontinues his efforts. If, after a while, he loses his balance and tumbles

over, there can be no longer any mistake. It is the saliva becoming more and more glutinous, irritating the fauces and threatening suffocation.

"To this naturally and rapidly succeeds an insatiable thirst. The dog that still has full power over the muscles of his jaws, continues to lap. He knows not when to cease, while the poor fellow labouring under the dumb madness, presently to be described, and whose jaw and tongue are paralysed, plunges his muzzle into the water-dish to his very eyes, in order that he may get one drop of water into the back part of his mouth, to moisten and to cool his dry and parched fauces. Hence, instead of this disease being always characterized by the dread of water in the dog, it is marked by a thirst often perfectly unquenchable. Twenty years ago this assertion would have been peremptorily denied. Even at the present day we occasionally meet with those who ought to know better, and who will not believe that the dog which fairly, or perhaps eagerly, drinks, can be rabid."

FITS

Are of several sorts, each kind being attributable to a different cause. It is most important therefore carefully to distinguish them. The commonest remedy resorted to by ignorant persons in a case of fits, namely bleeding, is precisely the one that is most likely to destroy the dog. Fits may be

classed as epileptic fits, teething fits, fits from worms, apoplectic fits, puerperal or sucking fits, and fits from distemper.

Epileptic Fits.

Symptoms.—These fits generally come on when the dog is at exercise; he suddenly seems stupified, staggers for a moment, cries out loudly, then falls upon his side, and remains for some time in more or less violent convulsions; the eyes are slightly protruded, the mouth is covered with foam, and there is a constant champing of the jaws.

Treatment.—Take up the dog in the arms, taking care that he does not bite, which he is very likely to attempt, and carry him home. Then administer, as soon as possible, an injection containing 2 parts sulphuric ether, 1 part laudanum, and 10 parts cold water. The animal should then be left alone for an hour, and the medicine repeated as often as may be necessary. I believe this to be the only kind of treatment of which this description of fit is susceptible.

The object of any further treatment will consist in getting the dog into a good state of health by regulating his diet, allowing him less animal food, giving occasional doses of castor oil if there is constipation, or purgatives and emetics (dose, tartar emetic 2 grains) if the dog is fat or overfed, and by the use of tonics if he is weakly.

FITS FROM TEETHING, OR WORMS,

Mostly occur in puppies, and are caused by the irritation attendant upon teething, or by the presence of worms.

Symptoms.—The puppy lies upon his side in convulsions, which are not so violent as those in epileptic fits. There is no frothing at the mouth, and the recovery is slow and gradual.

Treatment.—Place the puppy, for five or ten minutes, in a warm bath, of a temperature not exceeding 96 degrees. Then dry him quickly, and wrap him up warmly. If the fit is a severe one, administer the injection of ether and laudanum, as recommended in epileptic fits.

The after treatment of *teething* fits consists in occasional small doses of castor oil, if there is constipation. Youatt suggests lancing the gums and giving an emetic; this may be useful in some cases, but the puppy usually recovers without any such severe treatment. These fits occur either with the first teeth, during the first month, or when the permanent teeth are cut, which takes place from the fifth to the seventh month.

If the fits are caused by *worms*, they must be got rid of by the treatment recommended under the head WORMS.

Apoplectic Fits

Are caused by the pressure of blood upon the brain.

Symptoms.—The dog lies motionless, breathing heavily and audibly. There is no foaming at the mouth, but *the eye is fixed and bloodshot.*

Treatment.—Bleed freely; afterwards reduce the system by strong purgatives, such as Epsom salts (dose 2 drachms), given morning and evening; feed on a reduced vegetable diet. The attack is generally fatal.

Sucking Fits

Take place in the bitch when she is suckling, and are often the consequence of allowing her to rear too many puppies.

Symptoms.—The bitch lies down, panting heavily; there sometimes are only slight spasms passing over the diaphragm, but in severer cases the whole body is convulsed. The fit lasts from three to ten minutes.

Treatment.—These fits are caused by exhaustion, and are preceded by more or less emaciation and weakness; bleeding and the giving of purgatives are therefore clearly out of the question, and have probably caused the death of many animals suffering from these fits. When in the fit, the bitch may be placed for five minutes in a bath heated to a temperature of 96 degrees Fahr., after which she

must be dried quickly and kept warm. All the puppies but one or two must be taken away. She will, in most cases, gain flesh and strength from the day that her puppies are removed; if she does not, a tonic ball may be given. (See receipt for Tonic Pills, p. 184.)

Fits from Distemper

Are caused by inflammation of the substance or membrane of the brain. Fits in distemper are usually a fatal symptom. (See Distemper.)

Chorea.

Symptoms.—A constant convulsive jerking or twitching; sometimes confined to the muscles of the legs, sometimes extending to the shoulders and neck. Chorea mostly occurs during recovery from distemper, being probably a derangement of the nervous organization. Except in extreme cases, there is no very great disturbance of the system, though there is often considerable debility where the disease is of long standing.

Treatment.—The general health and diet must first be attended to. A few doses of castor oil are usually necessary; accompanied by blue pill (dose 5 grains) if the liver is deranged, as shown by the clay colour of the fæces. The food should be given twice a day, and should consist principally of vegetables, potatoes, oatmeal porridge, &c. When a

better state of health is established, it will be time to give medicines to remove the disease itself. For this purpose, it is best to begin with Liquor arsenicalis, mixing 2 drops with each meal, so that the dog will take 4 drops in the day. The quantity must be gradually and cautiously increased by 1 drop daily, and so increased for a week. The same quantity must then be continued, and will often have to be given regularly every day for a month, before a perfect cure is effected. As soon as the dog rejects his food, is bloodshot in the eyes, or has a running at the nose, it is necessary to stop the medicine, at least for a time. If it has had no perceptible effect in subduing the convulsive jerkings of the muscles, it would be advisable to try, night and morning, a ball containing—

Sulphate of zinc . . . . . 2 grains,
Powdered gentian . . . . . 10 grains,
Syrup of ginger, qu. suff.

Palsy.

Palsy in the dog attacks many different parts; sometimes it is confined to the hind quarters, sometimes it affects the fore-legs and neck. It gradually extends, and sometimes includes every limb and muscle.

Symptom.—A staggering gait; the dog falling about, from a loss of power in the muscles.

Treatment.—Gentle and regular exercise, and

friction. Give purgatives, followed, when the bowels are in good order, by nux vomica (dose from ¼ grain to 2 grains, according to size, daily, cautiously administered).

Kennel Lameness.

Symptoms.—A lameness occasioned by rheumatic pain in the shoulder, brought on by exposure to wet and cold.

Treatment.—An embrocation of equal parts of laudanum, hartshorn, and oil of turpentine, to be rubbed in every day, after a warm bath of the temperature of 96 degrees. The bowels to be kept in order by doses of castor oil; and 2 grains of the iodide of potash with a dessertspoonful of sarsaparilla to be given morning and evening. In most cases an essential part of the treatment consists in removing the dog to a warmer and drier kennel.

Palsy of the Back.

Symptoms.—The hind legs are affected with rheumatism, and drag painfully after the dog.

Treatment.—The same as for kennel lameness.

CHAPTER XX.

WORMS.

The Round Worm—The Maw Worm—The Tape Worm.

Worms are of three sorts; the round worm, the maw worm and the tape worm.

The Round Worm.

The round worm (*Ascaris lumbricoides*) is from 2 to 8 inches in length, and somewhat resembles the common earth worm, except in being of a pinkish-white colour, and pointed at both extremities.

Symptoms.—When the dog is observed to be dull, to have a ravenous appetite, an offensive breath, a staring coat, the belly hard, large, and of a dull, livid green colour, and to be losing flesh, the presence of worms may be suspected. Occasional attacks of diarrhœa, alternating with constipation, and the evacuation of small portions of mucus, are generally sure signs of worms. These symptoms, however, are not always present; and a dog may be afflicted with worms for a long time, with very little disturbance of the system. The

fits so common in puppies are often produced by the unsuspected presence of worms. See FITS.

Causes.—These worms are propagated by ova or eggs, and it is therefore supposed that they are introduced into the intestines with the food or drink; but the subject is a very obscure one. Predisposing causes are, a weakly constitution and the eating of trash, which remains undigested in the alimentary canal.

Treatment.—The first object is to expel the worms; and the second, to strengthen the system so as to guard against their return. The first object is best fulfilled by giving the dog anthelmintics or worm medicines, followed, if these medicines are not themselves of a purgative nature, by brisk aperients. As the eggs remain in the intestines after the expulsion of the worms themselves, they are generated anew, and consequently the medicine has to be repeated several times. Great caution must be used in the giving of these medicines, which, as they mostly act by poisoning the worm, are often of an acrid and highly deleterious nature, and are peculiarly dangerous in the case of young puppies, in which worms are most frequent.

The list of worm medicines is necessarily long; it having been found that worms which resist the action of one medicine, are expelled by the use of a different one. These medicines are of two classes; those which act mechanically, and those which act

by poisoning the worm. To the first class belong powdered tin, iron, zinc, and glass. These anthelmintics are safe in their action, but by no means so efficient as those of the second class, which comprehends turpentine, the male fern, the Areca nut, the bark of the root of the pomegranate and common salt.

This list will be quite sufficient, though it is shortened by the omission of some dangerous drugs, such as Indian pink and calomel, and of some comparatively inactive and useless ones, as wormwood, hellebore, tansy, rue, camphor, &c.

Areca nut powder is an excellent vermifuge; dose ½ drachm, to be followed in four hours' time by a tablespoonful of castor oil.

Oil of turpentine has the disadvantage of occasionally acting also upon the kidneys, and even upon the brain; but it is too useful a worm expellant to be omitted from the list. Its ill effects can be greatly diminished by combining it with *olive oil.* Dose for medium-sized dog 1 drachm, mixed with a large tablespoonful of olive oil, and followed in two hours by a dose of castor oil alone. A combination of Areca nut and oil of turpentine is a more active vermifuge than either drug separately. Dose ½ drachm of turpentine to 2 scruples of Areca nut. It should be followed by a dose of castor oil.

A milder, but very efficient worm medicine, is Venice turpentine, made into a pill, with freshly

grated Areca nut powder. The usual dose of Areca nut will be required, with as much turpentine as will make the pill. This is an excellent remedy for puppies and weakly dogs. It should be followed, in four hours, by castor oil, if the pill has not had a purgative effect.

Pomegranate bark may be tried when other remedies have failed. It is recommended for tape worm alone, but I have known it to bring away great quantities of round worms. Dose 1 scruple of the powdered root-bark, to be followed by castor oil in four hours.

Salt.—A teaspoonful of common salt is a mild vermifuge, well suited to weakly puppies; it is scarcely strong enough for grown dogs. A teaspoonful may be put in the mouth, and the dog forced to swallow it by closing his mouth.

The administration of every description of vermifuge should take place when the animal is fasting. In the case of a full-grown dog, he should have eaten nothing the previous day, and should have the medicine the first thing in the morning. With puppies, the last meal on the preceding day should be omitted.

The constitution of a weakly dog, and especially of a puppy, may be greatly injured by the injudicious use of worm medicines, and it is therefore advisable to begin with the milder anthelmintics, such as Areca nut, either alone or in combination with Venice turpentine, in doses of 5 to 8 grains

for a puppy under two months old, according to his size and strength.

As the action of all these medicines is variable, and the systems themselves of different dogs are very dissimilar, I have in every case mentioned the smallest quantities as doses; if they are not found sufficient, the dose must be increased on a second administration. In most cases, the anthelmintic given must be repeated in five days or a week, and as often afterwards as circumstances demand. Areca nut requires four or five repetitions to exterminate the worm; but the combination of turpentine and Areca nut need seldom be repeated more than twice.

When the worms are got rid of, it remains to improve the general health so as to prevent their return. This must be done by attention to feeding, keeping the bowels in good order, by occasional doses of castor oil, by giving proper exercise in the open air, and by preventing the dog from eating trash of any sort.

The Maw Worm.

The maw worm (*Ascaris vermicularis*) is about an inch in length, of a milky white colour, pointed at one end and blunt at the other.

Symptoms.—The presence of these worms is rarely revealed till they are discovered in the evacuations, unless they exist in very large quantities, when the symptoms are similar to those occasioned by the round worm.

Treatment.—As these worms chiefly inhabit the larger and lower intestines, they are more easily expelled by enemata than the other sorts of worms; of these, salt and water is the best. They are, however, also brought away in large quantities by doses of Areca nut followed by a large dose of aloes (20 grains). Two doses of Areca nut, with the interval of a week between them, followed, if necessary, by an injection of brine (salt 1 tablespoonful, water ¼ pint), are generally sufficient to rid the dog of the maw worm and to destroy the ova. An injection of aloes may also be used with excellent effect; and as it is not likely to injure the most delicate puppy, it is perhaps the most expedient treatment (use socotrine aloes 30 grains, milk ¼ pint).

The Tape Worm.

The tape worm (*Tænia solium*) differs from other worms in being solitary. It is of great length, flat, and jointed, and sometimes occupying the whole extent of the intestines, occasioning great disturbance to the system of the dog.

Symptoms are those described under the head Round worm.

Treatment.—The same as that required for the round worm. The stronger anthelmintics, however, must be used; none being more efficacious and safe than the oil of male fern (dose, 1 scruple), given in a ball with flour and Venice turpentine,

and wrapped in several folds of silver paper. If this fails, the oil of turpentine and olive oil mixture may be tried, or the root-bark of the pomegranate, as recommended for round worm, or an infusion of kousso (dose 2 drachms, infused with ½ pint of water). This medicine, however, often acts prejudicially upon the dog.

CHAPTER XXI.

SURGICAL DISEASES.

Difficult Parturition—Goitre—Cancer—Polypus—Falling of the Vagina—Inversion of the Womb—Cystic Tumours—Broken Bones—Dislocations—Wounds—Abscess—Lameness.

Most surgical diseases should be superintended by a properly qualified veterinary surgeon; but there are only too many cases, as, for instance, in remote country places, on the moors, in the colonies, and abroad generally, where no professional assistance, of course excluding that of farriers, &c., can be obtained, and where the lives of valuable dogs are lost for want of it.

Some operations require very little skill, and may be performed by any one possessed of common firmness and judgment; while some are so complicated, that the amateur can never hope to accomplish them; others, again, are so difficult, that nothing but absolute necessity, and the knowledge that the alternative of not doing so is the loss of the animal, should induce an unprofessional person to perform them.

In treating of surgical diseases, my object has been to dwell fully on the simpler operations, and such as may on an emergency be performed by

unprofessionals, and to describe more briefly those complicated cases which are discussed at greater length in more ambitious works than this.

Difficult Parturition.

In cases of difficult parturition, manual interference should always be delayed to the last moment. In nine out of ten cases where labour is protracted, patience will be rewarded by a natural delivery.

It often happens that there are throes continued for a longer or shorter period, accompanied with great pain, but producing no result. These are false labour pains or spasms, and from their close resemblance to the real pains of labour, are very deceptive. To distinguish them, press the hands gently on each side of the belly when the spasm is on; if labour has really commenced, the womb will be distinctly perceived to contract under the hands and will be felt as a hard body; if the throe is not caused by labour, the muscles of the belly alone will be felt to stiffen. If the false pains are very distressing and weakening to the animal, give a dessertspoonful of 1 part ether, 2 parts laudanum, and 10 parts water.

When the labour has continued for a long time with no result, and when the pains have subsided from evident debility, administer a tablespoonful of brandy and water. This will often stimulate the

womb and bring back the pains at once. If in two hours' time no effect is produced, the ergot of rye may be tried, in doses of 8 grains repeated every half-hour. It is apt to produce sickness, and if it does, it had better be stopped, and the brandy and water given in its stead.

When the pains have commenced, and the bitch seems, from weakness, unable to expel the pup, she can be assisted by placing a towel damped in very cold water under the belly, and by gentle pressure of the hands, supporting the muscles whenever an effort is made by the bitch. The towel must be kept cool by being frequently damped.

When the pup is partly expelled, the operator should by no means be in a hurry to assist its exit; but if no progress is made from weakness in the bitch, or from some obstruction in the passage, the pup may be taken hold of and pulled gently out, taking great care not to break it. If the pup is still in the passage, and either violent throes are made, with no result in getting it further, or else it remains there from the bitch being too weak to make the effort, the fore-finger, well covered with oil, may be passed up, and the expulsion of the fœtus assisted as much as possible. If the pup is dead, the fact can be ascertained by there being a greenish discharge, by there being none of the membrane which always surrounds a living pup, and by the cessation of the pains. In the case of a dead pup, it is advisable to try the effect of a

stimulant upon the womb, as the delivery is always tedious.

When there is delay in producing a pup, and at the same time a feverish, restless condition of the bitch, if she cries sharply, drinks often and refuses food, there is certain to be something wrong. Under these circumstances, and under these alone, a warm bath may be employed of a temperature of 96 degrees, the bitch being kept in it for ten minutes. If at the end of that time she is quieted, she may be left alone, and the recommencement of the pains watched for. If, however, considerable restlessness is still exhibited by the bitch, and the sharp cries are still given out, delivery by instruments must be resorted to. I do not recommend their use under any circumstances by an unpractised hand. There is much danger of the womb being torn by them, or of the fœtus being broken; and in any case there is more chance of the bitch's surviving if left alone, than when assisted by a person ignorant of the anatomy of the uterus.

When instruments are used by veterinary surgeons, the crotchet, made of a suitable size, and blunter than the sort employed for the human subject, is preferable to the forceps, as being less likely to do the animal an injury. The crotchet is used as follows:—being warmed and covered with oil, and the pup being felt with the forefinger, the crotchet is then pushed in along with the finger,

which must be kept pressed against the point of the crotchet. The pup must then be pushed into the hook formed by the instrument, and pulled gently through the vagina or passage.

To ascertain whether all the pups are born, the bitch must be felt from the outside; if there is another pup, it can be felt as an uneven mass, but care must be taken not to mistake the womb itself for another puppy. Perhaps the most certain symptom of the entire accomplishment of labour, is the behaviour of the bitch herself. After the birth of the last pup, she settles herself down comfortably in the nest, and gives unmistakeable evidence of returning ease and comfort.

It is often necessary to stop the bitch's milk when she has lost her pups, or is not allowed to suckle them. The flow of milk is frequently not great till the second or third day after pupping, and this may mislead an unpractised person, who might take no means to stop it when it does come on.

It is best to let her have no puppies at all, if they are not required to be kept; but the milk must be carefully drawn with the hand as it accumulates, and the bitch should have one or two doses of castor oil.

GOITRE

Is a soft, elastic tumour in the front part of the neck, which does not cause pain on being touched.

It frequently attacks scrofulous puppies, in which case it gradually increases in size and often proves fatal. In old dogs it commonly remains of the same size, and does not occasion much inconvenience, unless it is very large, when it may interfere with the circulation or with breathing.

Treatment.—Apply tincture of iodine to the tumour, and give 2 grains of iodide of potassium, sufficiently diluted with water, daily, increasing the quantity to 3 grains after the two first days.

Cancer

Commonly attacks the bitch, and is found almost invariably in the teats. In the dog, the seat of the disease is usually the scrotum. I quote Youatt's excellent account of the causes, commencement, and growth of cancer in the bitch:—

"With regard to the female, it is mostly connected with the secretion of milk. Two or three years may pass, and at almost every return of the period of œstrum, or 'heat,' there will be some degree of enlargement or inflammation of the teats. Some degree of fever also appears; but, after a few weeks have passed away, and one or two physic balls have been administered, everything goes on well. In process of time, however, the period of œstrum is attended by a greater degree of fever and enlargement of the teats, and at length some diminutive, hardened nuclei, not exceeding in size

the tip of a finger, are felt within one of the teats. By degrees they increase in size; they become hard, hot, and tender. A considerable degree of redness begins to appear. Some small enlargements are visible. The animal evidently exhibits considerable pain when these enlargements are pressed upon. They rapidly increase, they become more hot and red, various shining protuberances appear about the projection, and at last the tumour ulcerates. A considerable degree of sanious matter flows from the aperture.

"The tumours, however, after a while decrease in size; the heat and redness diminish; the ulcer partly or entirely closes, and especially when the next period of œstrum arrives, the tumour again increases, and with far greater rapidity than before, and then comes the necessity of the removal of the tumour, or if not, the destruction of the animal."

The term cancer is applied by veterinary surgeons to a scirrhous, or hard knotty tumour, in which, after a while, inflammation and suppuration or ulceration set in. Cancer can be distinguished from other forms of tumour by its adhering to the skin, by its peculiar knotty feel, and by its undefined nature, unlike the common tumour, of which the whole extent can be felt by the fingers.

If any success is expected from cutting out a cancer, it must be done before suppuration has

taken place, after which the cancer invariably spreads to the neighbouring parts. It must, however, be remembered that excision is only a temporary remedy; there is a cancerous taint in the blood, and the disease is almost certain to reappear sooner or later, though the animal may enjoy comfort and tolerable health in the meantime.

The operation of cutting out a cancer, though not a very difficult one, should never be attempted by an unprofessional person, except when the alternative of his not doing so is the death of the animal. The dog being brought under the influence of chloroform, the skin over the tumour is divided, and the cancerous growth carefully cut out; if any artery is divided, it must be instantly and firmly tied by an assistant. The wound is then sponged quite clean, and its edges being then brought together, a few stitches are passed through, and a broad, soft bandage passed securely round the belly of the dog. If there is much flow of blood from the small veins, it can be arrested by sprinkling the wound, before it is closed, with very cold water, and blowing upon it afterwards with a pair of bellows.

There is a other form of cancer, known by veterinary surgeons as *fungus*, and which occurs in the vagina of the bitch. It is soft, ulcerated, and accompanied by a purulent discharge which is mingled with blood. This excrescence is often too deeply seated to be cut out, which should be done

if it is large, and can be got at, and the bleeding arrested by injections of ice-cold water. When the bleeding has ceased, touch the wound with lunar caustic. If the growth is not of any size, the diseased part may be touched with lunar caustic, and an astringent injection used. By far the best for the purpose is Burnett's disinfecting solution, which may be used at first of the strength of 1 part solution to 65 water, to be afterwards gradually increased in strength. This is an excellent application for any kind of soft cancerous tumour, and the objects in using it are, first to deaden the surface of the tumour, and then, by increasing the strength of the injection, by degrees to destroy the whole mass.

POLYPUS

Is a smooth, red, pear-shaped tumour, adhering by a narrow neck or stalk to some mucous membrane, such as the interior of the nose, of the anus, or more commonly, the vagina in the bitch. There is a slight mucous discharge from the part, which should lead to examination, and which increases in quantity as the tumour enlarges.

Treatment.—In most cases the removal of a polypus is easy. The simplest and best way is to tie a piece of strong thread or silk round the neck of the excrescence, tightening it on the next and following day; and in two or three days the parts

separate and the tumour falls off. Or else the neck may be seized with a pair of forceps, and turned round several times, and so forced off; by this means the hæmorrhage is not so great as might be expected. If there is bleeding, blow upon the part with bellows, or apply cold water. Then touch the wound with lunar caustic, and continue to use an injection of goulard water 1 part, water 1 part. During the operation use chloroform, to keep the dog steady, though the operation is by no means a severe one.

Falling of the Vagina.

Some part of the membrane of the passage leading to the womb is occasionally seen to protrude in the form of a red skin.

Treatment.—Wash the part well with warm water, and put it carefully back into the place it ought to occupy. Inject three times a day, very cold water with alum (1 drachm of alum to a pint of water). Keep the bitch for a week in a hamper so small that she can only lie down in it with comfort, and give 6 grains of alum in 2 tablespoonfuls of water twice a day.

Inversion of the Womb

Is not a very common accident; it usually occurs after pupping. The womb is seen to hang down from the orifice of the vagina, in the form of a

thick, soft mass; differing from a polypus in being rough externally, in not being pear-shaped, and in not being attached to any stalk.

Treatment.—Mayhew mentions a case in which the womb, being inverted, was restored to its place and kept there. I can advise no one to attempt such an operation, which would certainly fail in nineteen cases out of twenty, and which would require such a knowledge of the anatomy of the parts as is possessed by very few, even among veterinary surgeons. Youatt relates a case in which inversion of the womb was successfully treated by applying a tight ligature round the neck of the uterus, and extirpating the womb close to the haunch. This is perhaps the only treatment likely to succeed generally. In my experience, the accident is invariably fatal.

Cystic Tumours

Are tumours containing either serum (the watery part of blood) or a gelatinous fluid, sometimes mixed with blood. They are usually found in the neck. They can be distinguished from other tumours and from goitre, by their being felt to contain a fluid, and by their not being connected with the surrounding parts, as in cancer.

Treatment.—First prick the tumour and squeeze out the contents, then inject the interior of the sac with a mild astringent, such as cold green tea;

squeeze that out, and the tumour will heal. If it does not, there is nothing for it but cutting through the sac, and tearing it out in pieces, taking care that it is entirely eradicated. It is an operation in which chloroform may be used with advantage.

Broken Bones.

The fact of a bone being broken, may be ascertained either by the deformity of the limb, or by the grating sound heard, or rather felt, when the broken edges of the bone are brought together, or by the limb having more than the natural movement when the part above the fracture is firmly held, and the lower part moved by the operator.

Fractures are divided into common fractures, where the bone is simply broken, and compound fractures, where parts of the broken bone protrude through the skin. Most cases of compound fracture are hopeless, from the amount of irritation and inflammation that sets in. The method employed in reducing a fracture is as follows:—the broken ends of the bone being placed in their natural position, are maintained in close contact and at perfect rest till they have firmly united. This will take place in from three to nine or ten weeks; but the length of time will greatly depend upon whether the parts have been nicely adjusted at first, and kept perfectly still afterwards.

To keep the limb at rest, adhesive bandages and

splints are required. The bandages are made of strong calico smeared with pitch. The best splints are made of strips of gutta percha, cut of the length of the limb, softened with warm water, and moulded to the shape of the sound limb. Splints can also be made of thin slips of wood, padded with pieces of blanket, or folds of thick flannel, or with tow, which being laid evenly on the splint, is kept in its place by a piece of linen wrapped round the whole splint.

When a broken limb is to be operated upon, the first thing is to cut off the hair closely; in some cases it is requisite to shave it; then adjust the ends of the bone, to do which, it is frequently necessary to have the limb extended or pulled out by an assistant; then wrap the whole limb in its natural position, firmly but not too tightly, with the adhesive bandage; then bind the splint over that, and finally fix the splint itself in its place by an outer bandage.

The dog must, in some cases of fracture, be kept for some weeks in a hamper or box, so small as to prevent his moving about, but large enough to allow of his lying down comfortably; his hind legs must be fastened together and a muzzle put upon him, to prevent his tearing at the bandages. This confinement, however, is not necessary, nor even expedient, in the great majority of cases; and it is better to chain the dog up, taking care that he has no opportunity of jumping up or down from a height.

The bandages need not be removed until the limb begins to swell, which it will probably do in a few days; they must then be taken off, and replaced less tightly. All further treatment will consist in renewing them as occasion requires, in keeping the bowels in good order, and in attending to the general health. In some instances of fracture in the dog, it is a long time before the bones will unite; in these tedious cases it has sometimes a good effect to allow the dog to take gentle exercise.

Broken ribs are detected by a depression where the fracture has occurred, and by the grating sound made when the dog breathes deeply. Bleed freely, unless the dog is much shaken and injured by the accident, and bind the chest tightly with a broad thick flannel bandage.

Dislocations.

Except in the knee-joint and the toes, dislocations are comparatively rare in the dog. The reduction of a dislocation is managed by two persons. One holds the limb firmly; the other pulls it out with one hand, and with the other guides the head of the bone into its socket. It is useless for a person unskilled in the anatomy of the dog, to attempt the reduction of the hip-joint, stifle or shoulder; but the reduction of the knee is a tolerably easy matter. When it is brought into its place, it must be kept there by a bandage, which will keep the joint

slightly bent. A bandage must also be used after dislocation of the toes.

WOUNDS.

Slight wounds, including bites and deep tears by thorns, are best treated by being kept open with a slightly stimulating lotion; yellow soap and water is as good as anything. If they are allowed to heal naturally, they quickly form a scab, which in time sloughs away, leaving an ugly scar; or else the skin grows rapidly over the wound, and an abscess forms beneath, which has either to be cut into, or else is tedious in healing, and is only partially absorbed at last, leaving a more or less disfiguring lump under the skin.

When the skin is torn in such a way that the edges are not likely to meet in the act of healing, it is advisable to keep the lips of the wound together with a few stitches. This should be done in the following manner: a threaded needle is passed through the skin on one side of the wound *from without*, inwards; then at a corresponding part through the other lip, *from within*, outwards. Then the ends of the thread—which should be either of silk or of thread, but not cotton, and well waxed to prevent its absorbing fluids, and so acting as a seton—are to be drawn together, without straining the parts in any attempt to draw the lips of a gaping wound into contact, and to be tied in

a tight double knot, and the ends cut off close. The number of stitches will of course depend upon the length of the wound; the intervals between each may be from ½ to ¾ inch. When stitches are employed to close a wound, it is necessary to muzzle the dog and put on a light bandage for a few days. Great attention must be paid to keeping the wound clean when suppuration begins to take place.

In cases of large open wounds, not extending very deep, and where the skin has been destroyed, it is a question whether they should be allowed to heal in the natural way, by forming a scab, which will in time drop off and show a scar below—or be kept open by dressing them and keeping them clean with lukewarm water and occasional poultices, when the wounds will heal slowly and surely, without leaving so ugly a scar as by the other method. A wound, however, should not be allowed to heal in the first of these ways, namely, by forming a scab, if it seems to be very tender to the touch, or emits a bad smell, or it is very likely to end in the formation of abscess.

Cuts on the legs can be protected from injury by spreading Canada balsam upon wash-leather, and this, being warmed, can be fastened round the leg in the same way as diachylon-plaster. Sporting dogs can be made to do their customary work with slight wounds on the pad, by encasing the foot in a boot, made by cutting a circular piece of leather

a little larger than the ball of the foot, and sewing in a larger piece, which is to serve as the side of the boot, along the edge of the round piece; the upper part is then stitched firmly round the leg below the knee.

Abscess.

Abscess is at first felt as a hard lump or swelling, causing considerable pain, more or less deep-seated, which gradually inflames, forms matter and discharges its contents through the skin. It is in most cases the result of local inflammation, either caused by a deep wound, or by general inflammation of the system. When it is discovered to have formed matter, it should be cut into, and the matter allowed to escape.

Lameness

May be the result of an unsuspected wound in the ball of the foot, or between the toes, of a thorn, of a strain of the shoulder, or of the leg itself, of slight rheumatism, or of fine gravel having got between the toes. Lameness may also be caused by what is known as *foot-sore*, which is an inflammation of the parts lying immediately under the thick skin of the foot. It is brought on by long travelling on hard dry ground. The complaint rapidly gets worse if the animal is neglected; the toes become swollen and inflamed, and finally the pad, or sole, itself drops off.

In the first stage of *foot-sore*, warm fomentations to the feet and a few gentle purgatives, combined with perfect rest, will ordinarily effect a cure. If matter has formed, it must be let out with the knife, and an application of Friar's balsam made to the parts.

When the lameness is not the effect of any such obvious cause as this, the foot should be washed with soap and water and examined for a wound or thorn, or irritation caused by gravel, and felt all over, especially with regard to there being any redness or discharge between the toes. If any such exist, it can be cured by cooling medicines and rest.

Strains in the leg can be detected by feeling, and by knowing how the lameness originated; and will yield to rest and cooling fomentations, followed by rubbing in a liniment composed of equal parts of laudanum, Liq. ammoniæ, and spirits of turpentine, when the heat in the parts affected has disappeared.

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THE END.

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