

orders he relinquished his fellowship in 1666, and resided for some time at Oxford, Dublin, and London successively. In 1688 he was elected Camden professor of history at Oxford; but in 1691 he was deprived of his professorship for refusing to take the oaths of allegiance to William and Mary. Retiring to Shottesbrooke in Berkshire, and living on the produce of a small estate in Ireland, which he had at first generously relinquished in favour of a near relation, he devoted himself to those literary labours in chronology and ecclesiastical polity on which his fame now rests. In the former department he published—*Discourse on the Phenician History of Sanchoniathon* (1681); *Annales Thucydidei et Xenophontei* (1696); *Chronologia Græco-Romana pro Hypothesibus Dion. Halicarnassei* (1692); *Annales Velleiani, Quintilianii, Statiani* (1698); and a larger treatise entitled *De Veteribus Græcorum Romanorumque Cyclis, obiterque de Cyclo Judæorum ac Ætate Christi, Dissertationes* (1701). All these obtained considerable reputation, and were frequently reprinted. Gibbon speaks of his learning as "immense," and says that his "skill in employing facts is equal to his learning." In the department of ecclesiastical polity his works are more numerous and of much less value, his judgment being far inferior to his power of research. In his earlier writings he was regarded as one of the greatest champions of the non-jurors; but the absurd doctrine which he afterwards promulgated, that immortality could be enjoyed only by those who had received baptism from the hands of one set of regularly ordained clergy, and was therefore a privilege from which dissenters were hopelessly excluded, justly deprived him of the confidence even of his friends. It is interesting, however, in view of the recent revival of the same doctrine, to know that he published in 1706 a treatise professing to prove from Scripture and the first fathers that the soul is naturally mortal. Dodwell died at Shottesbrooke, 7th June 1711. His eldest son Henry is known as the author of a pamphlet entitled *Christianity not founded on Argument*, to which a reply was published by his brother William, who was besides engaged in a controversy with Dr Conyers Middleton on the subject of miracles.

DOG, a name common to several species of *Canidæ*—a family of Carnivorous Mammals widely distributed over nearly every part of the globe. Many of the species belonging to this family, as the wolf and the jackal, are social animals, hunting in packs, and are readily tamed; while in confinement they show little or no repugnance to breeding. In a group thus eminently capable of domestication, it is not surprising that in the earliest times one or more species should have been brought under the dominion of man, or that under human care the domestic dog should have become, as Baron Cuvier calls it, "the completest, the most singular, and the most useful conquest ever made by man." There is sufficient evidence to show that the dog existed in the domesticated state during prehistoric times; consequently neither history nor tradition is available to solve the question of its origin. That must be decided, if at all, by the naturalist, and the variety of opinion existing on this point at the present time renders it exceedingly improbable that the parentage of the dog will ever be ascertained with certainty. Some suppose that all our breeds have sprung from a single wild source, others that they are the product of the blending of several distinct species. Of the former, the majority regard the wolf as the parent form, others favour the claims of the jackal, while a few regard them as the descendants of an extinct species, and point to the fossil remains of a large dog, found in the later Tertiary deposits, as the probable wild stock. The prevalent belief at the present day is probably that which regards the domestic dog as the pro-

duct of the crossing of several species, living and extinct. This opinion is founded on such considerations as the presence in the earliest historic times of many breeds (totally distinct from each other, and nearly resembling existing forms), the existence of wild species of dogs in all quarters of the globe, the fondness of savage man for taming wild animals, and the extreme improbability that among so many presumably equally tameable canine species only one should have been chosen for domestication. Nor is it to be forgotten, as Darwin has well shown, that fear of man in most wild animals is a gradually acquired instinct, and that before its acquirement a wild species would have been much more readily tamed than after. Thus the wild dog of the Falkland Islands (*Canis antarcticus*), when these were first visited by man, approached him without sign either of fear or of aversion. The weightiest reason for this opinion, however, lies in the fact that many of the breeds of domestic dogs, found in different countries, bear a more or less striking resemblance to the wild species still existing in those countries. The Esquimaux dogs of North America so closely resemble the wolf of the same regions, both in appearance and in voice, that Sir J. Richardson on one occasion mistook a pack of those wild animals for a troop of Indian dogs; and the Indians are said to take the young of wolves in order to improve their canine breed, which would seem to prove that the dog and wolf are sufficiently fertile *inter se*. The Hare Indian or Mackenzie River Dog, although somewhat smaller in size than the prairie wolf (*Canis latrans*) occurring in the same regions, so resembles the latter that Richardson could detect no decided difference in form. It seems, in fact, to bear the same relation to the prairie wolf that the Esquimaux dog does to the great grey wolf already mentioned. The wolf certainly exhibits few peculiarly dog-like qualities, being both ferocious and cowardly, and showing no attachment to man; but instances, nevertheless, are on record of tamed wolves which in their gentleness, in love for their masters, and in intelligence, showed true dog-like capacity. The Esquimaux dogs are likewise decidedly wolfish in disposition, showing little or no attachment to their owners, and sometimes, it is said, even attacking them when pressed by hunger. Distinct varieties of the wolf occur in Europe and in India, and such European breeds as the shepherd dog of Hungary so closely resemble the wolf that an Hungarian has been known to mistake that animal for one of his own dogs; while certain of the Hindu pariah dogs are said by Blyth to resemble the Indian variety of wolf. The large semi-domesticated dogs of the northern parts of both hemispheres may thus be regarded as principally derived from the various species and varieties of wolves still existing there. The period of gestation in the wolf and dog is the same, being 63 days in both. In the tropical regions of the Old World the wolf disappears, and with it the prevalence of wolf-like dogs, their places being taken by smaller breeds, such as certain of the pariah dogs of India and of Egypt, between which and the jackals abounding in those countries no structural difference can, according to Geoffroy Saint-Hilaire, be pointed out. Their period of gestation agrees with that of the dog and wolf, and like dogs, tamed jackals when caressed "will," says Darwin, "jump about for joy, wag their tails, lower their ears, lick their master's hands, couch down and even throw themselves on the ground belly upwards;" when frightened, also, they carry their tails between their legs. Jackals associate readily with dogs, and their hybrid offspring are not sterile; there is also an instance on record of one of these which barked like an ordinary dog. The habit of barking, so characteristic of dogs, is not, however, universal among them, the domestic dogs of Guinea and certain Mexican breeds being described

as dumb. This faculty appears to be readily lost and to be capable of reacquirement. The domestic dogs which ran wild on the island of Juan Fernandez are said to have lost the power of barking in 33 years, and to have gradually reacquired it on removal from the island. The Hare Indian Dog makes an attempt at barking, which usually ends in a howl, but the young of this breed born in the Zoological Gardens seem to possess this faculty to the full extent. In tropical America, where jackals are unknown, there are several wild species of dogs to which the domestic breeds of those regions bear a considerable resemblance, and at the present day the Arawak Indians cross their dogs with an aboriginal wild species for the purpose of improving the breed. In Australia the Dingo, regarded by many as constituting a distinct species indigenous to that country, its remains having been found in caves associated with those of other extinct mammals, occurs both in the wild state and domesticated at the present day. Darwin, after reviewing this question, concludes that "it is highly probable that the domestic dogs of the world have descended from two good species of wolves (*Canis lupus* and *C. latrans*), and from two or three other doubtful species of wolves, namely, the European, Indian, and North African forms, from at least one or two South American canine species, from several races or species of the jackal, and perhaps from one or more extinct species."

Remains of the dog, of Neolithic age, occur in the kitchen-middens of Denmark, and in similar deposits in Switzerland. In Denmark the earliest known dog is followed, in the Bronze period, by a larger breed, and that by a still larger form in the succeeding or Iron period; while a somewhat similar succession occurs in Switzerland. These successive changes, however, may merely indicate the appearance in those countries of new races of prehistoric man, who brought with them their own dogs. In historic times the earliest records of the dog are to be found in the figures of these animals on Egyptian monuments from three to five thousand years old; and these show that thus early, such varieties as the hound, greyhound, watch-dog, and turnspit were cultivated on the banks of the Nile. By the ancient Egyptians the dog was worshipped under the title Anubis, as the genius of the River Nile,—the appearance of Sirius, the dog star, corresponding with the time of the annual rise of that river. The city of Cynopolis was built in its honour, and there its worship was carried on with great pomp. Certain kinds of dogs were regularly sacrificed to Anubis, their bodies being afterwards embalmed; and occasionally the mummies of these are still found. The earliest record of the dog in sacred history is in connection with the sojourn of the Israelites in Egypt; and the religious homage paid to it by their oppressors may probably explain why the Jews were taught to regard it as unclean. Under Moslem law, which in many matters was founded upon Jewish practices, the dog occupies an equally degraded position; and throughout Mahometan countries at the present day, their generally wretched condition bears ample testimony to the neglect and ill-treatment to which for centuries they have been subjected. The pariah dogs of Eastern cities know no master; they prowl about the streets in troops, eating whatever garbage may come in their way, thus serving the useful purpose of scavengers, and occasionally receiving a meal from the more humane of the inhabitants. On no account, however, must even the garments of an orthodox Mahometan be defiled by their touch, and such is the intelligence and sagacity of these ownerless curs that, having become aware by painful experience of this religious prejudice, they seem to take the greatest care to avoid giving such offence. The value set upon the dog by the Egyptians seems to have been shared in by the ancient

Greeks and Romans, who possessed many breeds closely allied to still existing forms. Those early breeds, however, are remarkable for the entire absence of pendulous ears, which do not make their appearance till near the decline of the Roman empire. By both Greeks and Romans they were employed in the chase, and in war, and for the latter purpose they were armed with spiked collars, and sometimes even with a coat of mail. Corinth was said to have been saved by 50 war dogs, which attacked the enemy that had landed while the garrison slept, and which fought with unbounded courage till all were killed except one, which succeeded in rousing the garrison. Shakespeare thus put no figure of speech in the mouth of Antony when he exclaims—

"Cry havoc, and let slip the dogs of war."

Dogs are naturally carnivorous, preferring flesh that is slightly putrid; but they can also live on vegetable food, and in countries where the dog itself is eaten, it is generally thus fed. In drinking it laps with its tongue, and it never perspires, although when heated its tongue hangs from its mouth, and a fluid runs from it. When about to go to sleep, no matter where, it turns round and round, and scratches the ground with its forepaws as if to form a hollow couch; and in this seemingly senseless action it is no doubt continuing a habit once found useful to its wild progenitors. Its sense of smells and hearing are exceedingly acute, and many suppose that the remarkable power possessed by the dog, in common with the cat, of finding its way for great distances along unknown roads may be due to the exercise of the former sense. The differences that obtain between the various breeds of dogs are very great, the skulls, according to Cuvier, differing more from each other than they do in the different species of a natural genus. The molar teeth, which normally consist of 6 pairs above and 7 below, sometimes number 7 pairs above and below, while in the hairless dog of Egypt the teeth are sometimes reduced to a single molar on each side, incisors and canines being entirely wanting. Some varieties are six times as long as others, excluding the tail, and the number of vertebrae in the latter organ is also exceedingly various; nor is the number of mammae always uniform, there being 5 on each side in some, and 4 in others, while occasionally the number on the two sides is unequal.

While man has thus bestowed great attention on the physical development of the dog, and availing himself of natural variations has, by careful selection and intercrossing, moulded the dog into an almost infinite variety of forms, he has also, by education, developed its moral and intellectual capabilities, so that the dog may, in this respect, be said to have, within its own limits, kept pace with its master's advancement; and it is undoubtedly owing to a certain community of feeling existing between dog and man that this domestic animal has, since the earliest times, been regarded as the companion as well as the humble servant of mankind. There are few human passions not shared in by the dog. It is, like him, subject to anger, jealousy, envy, love, hatred, and grief; it shows gratitude, pride, generosity, and fear. It sympathizes with man in his troubles, and there are numerous instances on record of its showing sympathy for the distressed of its own kind. It remembers, and is evidently assisted thereto, as man is, by the association of ideas; that it is not devoid of imagination may be assumed from the fact that it dreams, pursuing in its sleep imaginary game. Its judgment is often singularly correct; while it may almost be said to have a religion, in which man is its god, and his will its rule of conduct, disobedience to which produces an evident feeling of shame and a quiet submission to punishment. It shares with man in awe of the unknown, and the most

courageous dog will often tremble at the sudden rustle of a leaf. While the possession of such faculties has rendered him fit above all other animals for the companionship of man, the physical and intellectual qualities characteristic of the various breeds have been seized upon and developed to their utmost by man, so as to enable him to use the dog for a great variety of purposes; what these are will appear in the following necessarily brief account of the more important breeds of dogs.

According to Professor Fitzinger, there are at least 189 distinct varieties of the domestic dog, and when it is considered that the origin of many if not most of these is uncertain, it is not surprising that considerable difference of opinion should exist as to the most natural mode of grouping them together. Their arrangement into the following six races, founded to a certain extent on the form and development of the ears, probably affords an approximation to a natural classification, viz., WOLF-DOGS, GREYHOUNDS, SPANIELS, HOUNDS, MASTIFFS, and TERRIERS.

I. WOLF-DOGS.—Throughout the northern regions of both hemispheres there are several breeds of semi-domesticated wolf-like dogs having nearly erect ears, and long woolly hair; these include among others the dogs of the Esquimaux and the Kamtchadales. The Esquimaux Dog is usually of a black and white colour, nearly as large as a mastiff, with a fine bushy tail, and sharp pointed muzzle. It is of the greatest value to the inhabitants of the boreal regions of America in hunting the seal, bear, and reindeer; while it is equally useful as a beast of burden, carrying loads on its back—a kind of work for which dogs are by no means well suited—and drawing sledges over the snow. On a good road half a dozen of these dogs will draw, it is said, from 8 to 10 cwts., at the rate of 7 miles an hour; and Kane, the Arctic traveller, tells how that number of dogs, well worn by previous travel, carried him with a fully burdened sledge, between seven and eight hundred miles during the first fortnight after leaving his ship—a mean rate of 57 miles a day. According to the same authority, the training of these dogs is of the most ungracious sort. "I never heard," he says, "a kind accent from the Esquimaux to his dog. The driver's whip of walrus hide, some 20 feet long, a stone or a lump of ice skilfully directed, an imprecation loud and sharp, made emphatic by the fist or foot, and a grudging ration of seal's meat, make up the winter's entertainment of an Esquimaux team." Owing to the ill-treatment to which they are thus habitually subjected, they are highly irritable and difficult to manage, and in sleighing it is necessary to have a well-trained dog as leader, to whom the driver speaks, and by whom the other dogs in the team are guided. They readily relapse into the wild state, and have been known thus to hunt the reindeer in packs like wolves. These dogs have borne a prominent part in Arctic exploration, and much of the difficult work done in this field would have been well-nigh impossible without them. The Kamtchatka dogs are also used for sledging, and are famed for their swiftness and endurance. During summer they run at large and cater for themselves, returning in winter to their masters, who feed them principally with the heads of dried fish.

The Sheep-dog.—In Eastern countries where the sheep follow the shepherd, the duties that fall upon the dog are simpler, and require less intelligence, than those performed by the European breeds. Their task is chiefly to defend the flocks and herds from wild beasts and robbers, and for this purpose the wolf-like Turkoman Watch-dog and the Sheep-dog of Natolia are, by their great strength and courage, eminently fitted. The former is described by Sir J. M'Neill as a shaggy animal, nearly as large as the Newfoundland dog, and very fierce and powerful, the dam of the specimen he describes having killed a full-grown wolf

without assistance. The sheep-dog of Europe is generally classed among the wolf-like dogs, owing to the erect or semi-erect character of its ears, its pointed nose, and shaggy covering; and Buffon, for such reasons, regarded it as nearest to the primitive type of the domestic dog. It is more reasonable to suppose with Martin (*History of the Dog*) that those points "only indicate purity of breed unalloyed by admixture with other varieties." The fact that its life is spent almost entirely out of doors, and that it has little or no opportunity of mixing with dogs other than of its own kind, would tend to preserve uniformity in external appearance; while its high cerebral development and intelligence prove beyond a doubt that the breed of sheep-dogs is one of the most highly improved, and in this respect remotest from the primitive type. Its whole intellect is devoted to the one duty of tending its master's flocks, and in the performance of this it is equally sagacious, vigilant, and patient. At a word, or even a look, from its master, it will gather the sheep, scattered for miles around, to one place. During and after the snowstorms to which highland districts are so frequently exposed, the sheep-dog is invaluable in saving its master's property from almost total destruction. Without it the Highlands of Scotland would be almost useless for sheep-farming purposes. "It would require," says the Ettrick Shepherd, "more hands to manage a stock of sheep, gather them from the hills, force them into houses and folds, and drive them to markets, than the profits of the whole stock would be capable of maintaining." The sheep-dog stands about



FIG. 1.—Sheep Dog.

15 inches high, is covered with long shaggy hair of a black colour varied with dark grey or fulvous brown, and its tail is of moderate length, slightly recurved and bushy. In disposition it is quiet; and although not quarrelsome, it shows great courage in defending its charge. It will not wantonly attack a stranger, but evidently regards him with suspicion, and rejects all friendly advances. There are three varieties of the sheep-dog found in Great Britain, viz.—the Scottish Collie, standing only from 12 to 14 inches high, and regarded as the purest and most intelligent; the Southern Sheep-dog, of larger size, but with shorter fur, and having the tail often very short—a peculiarity which, according to Bell, "appears to be perpetuated from parents whose tails have been cut;" and the Drover's Dog or Cur, generally black and white in colour, and taller in its limbs than the others. It is employed in driving sheep and cattle to the city markets, and in the discharge of this duty shows intelligence quite equal to that of the other varieties; although in the treatment of the herds under its charge, it often displays a more savage disposition. The sheep-dogs of South America are so trained as to unite in themselves the duties of dog and shepherd. "When riding," says Darwin, "it is a common thing to meet a large flock of sheep, guarded by one or two

dogs, at the distance of some miles from any house or man." And on inquiry he found out the method by which this friendship between dog and sheep had been established. The dog when a puppy is removed from its mother, and is no longer allowed to associate with other dogs, or even with the children of the family. It is kept in the sheep pen, and suckled by a ewe. Generally also it is castrated and thus has little or no community of feeling with its kind. Brought up among the sheep it shows no desire to leave the flock, but assumes the position of leader. "It is amusing," says the above writer, "to observe, when approaching a flock, how the dog immediately advances barking, and the sheep all close in his rear as if round the oldest ram." It comes home daily for food, on receipt of which it immediately returns to the flock; and this it is often taught to bring home in the evening.

The Newfoundland and Great St Bernard or Alpine Dogs occupy an uncertain position, forming, according to some authors, a group by themselves, and being classed by others among the wolf-like dogs, although in their large and pendulous ears they differ widely from the typical forms already noticed.

The Newfoundland Dog is believed to have been brought to England from the island to which it owes its name, but probably owing to partial crossing, it differs somewhat from the original American breed, the latter being smaller in size, with the muzzle less blunted, and almost totally black in colour. In Newfoundland and Labrador these dogs are used as beasts of burden, drawing considerable loads of wood and provisions on sledges. The feet are partially webbed, and consequently they are unrivalled as water-dogs, and although their weakness of scent and comparative slowness of foot renders them useless to the hunter, yet in a country of fens and morasses, the sportsman finds them of the greatest service in rescuing birds that have fallen into the water; nor do they hesitate in their eagerness for retrieving to make their way through the roughest cover. The English variety of Newfoundland Dog is a noble creature, standing 30 inches high at the shoulders.



FIG. 2.—Newfoundland Dog.

its hair waved or curly and of a black and white colour in nearly equal proportions, its tail massive and bushy and curled upwards at the extremity. Equally noble in disposition, it does not allow the annoyance of smaller dogs to disturb its serenity, while its patience with children is not readily exhausted. In defence of its master's property it will fly with bull-dog ferocity at any intruder, while it will battle with the waters to save him from drowning. Its services in the saving of life are well known. When kept in confinement its temper is more variable, and in a fit of irritation these dogs have been known to attack those for whom they have previously shown the greatest regard; but

even in confinement such cases are altogether exceptional. This breed is supposed by some not to be indigenous to North America, but to have been introduced either on the first discovery of Newfoundland by the Norwegians about the year 1000, or on its re-discovery by Cabot in 1497. The Norwegians, according to Martin, have dogs closely resembling the Newfoundland breed, which are used in hunting bears and wolves, and which are armed with spiked collars in order to protect them from the wolves which seek to seize them by the throat. The Great St Bernard Dog of the present day is a powerful animal, as large as a mastiff, with close short hair and pendulous ears, and varying in colour, in one case being described as "sandy red or tawny" with black muzzle, in another as "more or less marked with grey, liver colour, and black clouds." Previous to 1820 there existed another breed of these dogs, closely allied in form and size to the Newfoundland, but in that year the greater portion of them died of an epidemic, which necessitated the introduction of the present variety. These dogs are kept by the monks of the Hospice of St Bernard, in their convent, situated on one of the most dangerous passes between Switzerland and Italy, near the top of the Great St Bernard, where they are trained to the work of rescuing travellers who, overtaken by the snow-storm, may have lost their way, or sunk benumbed by the cold. On such occasions these sagacious and powerful dogs set out from the convent in pairs, one bearing a flask of spirits attached to his neck, the other with a cloak. Should they come upon the baffled yet struggling traveller, they conduct him to the convent; but should he have succumbed and be covered by the snow, their keen scent detects his presence although buried several feet beneath the surface. By loud barking—and a young dog of this breed kept many years ago in the suburbs of Edinburgh was able to make itself heard a mile away—they apprise the monks of the need of succour, while with their feet they attempt to clear away the snow from the body. In this way these dogs are instrumental in saving many lives every year, although often at the sacrifice of their own, one dog which thus met its death bore a medal stating that it had been the means of saving twenty-two lives.

II. GREYHOUNDS.—Representations on Egyptian monuments prove the existence of the greyhound race of dogs at least 3000 years ago, and the silky-haired breeds existing in Egypt, Arabia, and Persia at the present day are probably the slightly modified descendants of those ancient forms. The numerous varieties of this race may be conveniently grouped into the wire-haired and smooth-haired breeds,—of the first of which the Irish Greyhound or Wolf-dog is an example. In former times this magnificent breed was employed in Ireland in hunting the wolf and the stag, but the extirpation of these beasts of chase led to the neglect and consequent degeneracy of the breed, and it has now become extinct in that country. It was probably introduced from the sister isle into Scotland, where its modified descendant, the Scottish Deerhound, in hunting the stag still bears testimony to the great strength and agility of its progenitor. The Old English Greyhound was only allowed to be kept by the nobles and princes, and the killing of it was, under the old game laws, a felony punishable by death. It was employed in coursing the red deer and fallow deer, and Queen Elizabeth is said to have witnessed, on one occasion, the pulling down of 16 bucks by greyhounds. These must have been much more powerful animals than the modern English breed, which, however, is regarded as the finest of the smooth-haired greyhounds. In speed and wind it is unrivalled, all other points having been sacrificed to these by breeders. It has thus almost lost the power of scent, and is the only dog that hunts by sight alone, hence probably the name *gaze*

hound formerly applied to it. According to Daniel, its speed on flat ground is little inferior to that of a racehorse,



FIG. 3.—Greyhound.

while on hilly ground it is probably superior to it. Every part of its body is suggestive of activity and speed—the long and pointed muzzle, the narrow head, thin neck, chest deep and flanks contracted, long slender legs, and the tail narrow and curved upwards. It is exceedingly docile, good-tempered, and affectionate. The colour varies in different breeds, and even in individuals of the same breed. Bell suggests that the greyhound may owe its name to the prevailing colour of the original stock; while others, with more probability, derive it from the ancient British *grech* or *greg*, a dog. The Italian greyhound is a small but exceedingly elegant and delicate breed, relegated in this country to the parlour as a ladies' pet. The Lurcher is supposed to be the result of a cross between the rough greyhound and the sheep-dog, having the sharp, pointed muzzle of the former, and owing its diminished height but greater stoutness to the latter. It resembles the sheep-dog still more in its great intelligence, and in devotion to its master. That master is usually the poacher, and in his illegal pursuit of game, the keenness of scent, the cunning, and the absolute silence of this dog render it the most suitable of all for such nocturnal work. It waylays the rabbit returning to its burrow, its cunning circumvents the hare where its speed would not avail, and it has strength sufficient to pull down the fallow deer. According to Colonel Smith these dogs sometimes run wild when their owners are captured and imprisoned, and when thus catering for themselves they have been regularly hunted with hounds.

III. SPANIELS.—The spaniels are characterized by large pendulous ears, long silky hair often curled and shaggy, and acute scent. In cerebral development, and, consequently in intelligence, they are probably superior to all other dogs, while they are unrivalled in docility and in devotion to man's service. They include the Common Spaniel, the Water Dog, and the Setter, besides numerous fancy varieties, as King Charles's Spaniel, the Blenheim Spaniel, and the Maltese Dog. The Spaniel is the favourite of the sportsman, entering more than any other dog into his master's feelings, and seeming to enjoy the sport for its own sake. It is elegant in form, with remarkably long ears, and beautifully waved hair, usually of a red and white colour. It takes readily to the water, and has been known to exhibit a remarkable propensity, as well as great dexterity, in fish-catching. The Water Dog is larger than the spaniel, and is covered with abundant curly hair. Its colour is generally a mixture of black and white. From its aquatic habits it is of great service to the water-fowl sportsman as a retriever. It is readily taught to fetch and carry, and the sagacity which it shows in finding any article it has once seen, but which has afterwards been lost or

purposely concealed, is truly remarkable. The Setter is also a favourite with sportsmen, its habit of crouching when



FIG. 4.—Setter.

it has scented game rendering it specially serviceable. This habit, like that of pointing, is probably, as Darwin suggests, "merely the exaggerated pause of an animal about to spring on its prey." It is generally white in colour, with large liver-coloured spots.

IV. HOUNDS.—Hounds are those dogs with long pendulous ears, close hair, and long deep muzzle which hunt by scent. They include the Bloodhound, Staghound, Foxhound, Harrier or Beagle, and Pointer.

The Bloodhound, regarded by many as the original stock from which all the other varieties of British hounds have been derived, is now rarely to be met with in entire purity. Its distinguishing features are long, smooth, and pendulous ears, from 8 to 9 inches in length, full muzzle, broad breast, muscular limbs, and a deep sonorous voice. The prevailing colour is a reddish tan, darkening towards the upper part, and often varied with large black spots. It stands about 28 inches high. The bloodhound is remarkable for the acuteness of its scent, its discrimination in keeping to the particular scent on which it is first laid, and the intelligence and pertinacity with which it pursues its object to a successful issue. These qualities have been taken advantage of not only in the chase, but also in pursuit of felons and fugitives of every kind. According to Strabo, these dogs were used in an attack upon the Gauls. In the clan feuds of the Scottish Highlands, and in the frequent wars between England and Scotland, they were regularly employed in tracking fugitive warriors, and were thus employed, according to early chroniclers, in pursuit of Wallace and Bruce. The former is said to have put the Sleuth-hound, as it was called, off the scent by killing a suspected follower, on whose corpse the hound stood,

"Nor farther moved fra' time she found the blood."

For a similar purpose captives were often killed. Bruce is said to have baffled his dogged pursuer as effectually, though less cruelly, by wading some distance down a stream, and then ascending a tree by a branch which overhung the water, and thus breaking the scent. In the histories of border feuds these dogs constantly appear as employed in the pursuit of enemies, and the renown of the warrior was great who,

"By wily turns and desperate bounds,
Had baffled Percy's best bloodhounds."

In suppressing the Irish rebellion in the time of Queen Elizabeth, the earl of Essex had, it is said, 800 of these animals accompanying the army, while in later times they

became the terror of deer-stealers, and for this purpose were kept by the earls of Buccleuch so late as the 18th century, and even at the present time their remarkable power of scent is occasionally employed with success in the detection of murder. The Cuban Bloodhound is of Spanish descent, and differs considerably in form from the English variety, having small, though pendulous ears, with the nose more pointed, and with a more ferocious appearance. Its employment in the capture of runaway slaves, and in the cruelties connected with the suppression of negro insurrections, has brought the animal into the evil repute which more properly belongs to the inhuman masters, who thus prostituted the courage, sagacity, and pertinacity of this noble dog to such revolting purposes.

The Staghound has been generally regarded as the result of a cross between the slow-paced old southern hound



FIG. 5.—Staghound.

and the fleet foxhound; but it has been objected that the breed was known in England long before the foxhound was made use of, and indeed before there was an animal at all resembling the one which is now known by that term, and those who maintain this view regard the staghound as a bloodhound crossed with some lighter dog, as a greyhound or a lurcher. However produced, it is a majestic



FIG. 6.—Foxhound.

dog, of great strength and considerable swiftness, besides possessing in common with the bloodhound, and with it alone, the property of unerringly tracing the scent it is first laid upon among a hundred others. In the reign of George

III., who was himself ardently attached to the sport of stag-hunting, packs of these dogs were maintained in several parts of the country, but since the death of that monarch this form of hunting has declined, and the total extinction of these dogs at no distant date seems probable. The Foxhound is the hunting-dog upon which the breeder has bestowed the greatest pains, and, according to Bell (*British Quadrupeds*), his efforts have been rewarded "by the attainment of the highest possible degree of excellence in the union of fine scent, fleetness, strength, perseverance, and temper." It stands usually from 20 to 22 inches high at the shoulders, and is of a white colour, marked with large clouds of black and tan. Its speed is such that a foxhound has been known to get over 4 miles in 7 minutes, while its endurance has been shown in such cases as the 10 hours' continuous run performed by the duke of Richmond's hounds in 1738 before killing the fox, during which many of the sportsmen tired three horses, and several of the latter died during the chase. The Harrier is smaller



FIG. 7.—Harrier.

than the foxhound, not exceeding 18 inches in height at the shoulders, and is exclusively used, as the name shows, in hunting the hare. Of late years it has been greatly improved, so as to be almost literally a foxhound in minia-



FIG. 8.—Beagle.

ture. According to Beckford, to whom much of the improvement in the breed is owing, "harriers, to be good, like all other hounds, must be kept to their own game. If you run fox with them you spoil them; hounds cannot be

perfect unless used to one scent and one style of hunting." A still smaller hound is the Beagle, from 12 to 14 inches high, the most diminutive of the hunting dogs. It was formerly a great favourite, being used in hunting the hare, but in this it has been almost wholly superseded by the harrier. It is much slower than the foxhound or harrier, but in spite of this its exquisite scent and its perseverance seldom fail to secure for it the object of its chase, although it may be after a leisurely hunt of 3 or 4 hours. The voice of the beagle is highly musical, and on this account a certain number of them were formerly added to each pack of hounds as a band now is to a regiment of soldiers. Diminutive packs, from 9 to 10 inches high, have been kept, and O'Connell used to beguile his winter leisure with a dozen of these tiny favourites. The Pointer is related to the hounds, and is supposed to be derived from an old Spanish breed. It is a beautiful, smooth-haired dog, coloured somewhat like a foxhound, active in its movement, and patient of fatigue. It owes its name to its habit of standing fixed at the scent of game, and this, like the crouching of the setter, whether due to long-continued training alone, or to the modification and exaggeration by man of the instinctive start of surprise common to all dogs, when first aware of their prey, is now inherited, the puppy pointing before his training has begun. The strength of this pointing propensity was never more signally shown than in the case, told by Daniel, of two pointers which stood immovable as statues during the hour and a quarter occupied in sketching them. The Dalmatian Dog is a remarkably handsome breed, apparently intermediate between hound and pointer. It is of a white colour, thickly



FIG. 9.—Dalmatian Dog.

marked with rounded black spots, but it is not sufficiently keen-scented or sagacious to be of use in hunting. It has accordingly been relegated to the stables, where it receives the training necessary to a coach-dog. It is known in France as the *Brague de Bengale*, and is supposed to be an Indian variety.

V. MASTIFFS.—The Mastiff race of dogs is characterized by extreme shortness and breadth of muzzle, enormous strength of jaws, and general robustness of form. It includes the Mastiff, the Bull-dog, and the Pug.

The Mastiff equals in courage, while in strength, intelligence, and mildness of disposition it excels, its nearly the bull-dog. It is commonly supposed to have been the breed of large dogs abundant in Britain during Roman times, which were exported in large numbers to Rome for the purpose of fighting in the Amphitheatre, although Colonel Smith believes that these early British dogs were only bull-dogs of a larger size than the present breed, and that the mastiff was introduced into Britain from the cold regions of Central Asia. It is a large dog, standing 30

inches high at the shoulders, with thick muzzle, pendulous lips, and heavy expression, its ears small and drooping, and the tail well developed. It is usually of a buff colour, with ears and muzzle darker. Although fierce in combat

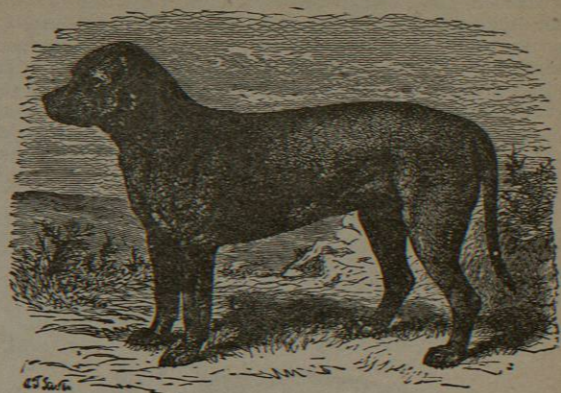


FIG. 10.—Mastiff.

it does not attack without considerable provocation, and it bears the teasings of children with the greatest good nature. When in former times it entered into combat with wild animals, it has been known to engage a bear, a leopard, and a lion, and pull each of them down in succession. At the present time the breed is rarely met with pure, and is chiefly useful as a watch-dog, its sagacity and fidelity in this capacity being well known. While he shows great attachment to man when made his companion, the temper of the mastiff becomes soured by confinement, and he is then dangerous to strangers. The Thibet Mastiff is larger than the English breed, and its countenance is still heavier. It is the watch-dog of the tribes inhabiting Thibet and the Central Asian table-land, to whom it is strongly attached, although exceedingly savage towards strangers. There is a huge mastiff figured on an Assyrian sculpture, 640 B.C., and Sir H. Rawlinson states that similar dogs are still imported into that country. The Bull-dog is the least sagacious, as well as the most ferocious and obstinate, of the dog tribe. It is smaller than the mastiff, but is strongly built. Its broad, thick head, the projection of the lower jaw beyond the upper disclosing the incisor teeth, the sudden rise of the head from the face, and the scowling expression of the eyes, combine to make the countenance of the bull-dog terrible. Bell points out, in his *History of British Quadrupeds*, the resemblance in the deep chest, the narrow loins, muscular limbs, and stiff tapering tail of the bull-dog to the elegant form of the greyhound. The chief difference appears in the muzzle, a variation which may have suddenly arisen in a single individual, and been perpetuated in its progeny. The ears of the bull-dog are short and semi-erect, and the nostrils distended; the colour varies, being brindled in some, and black and white in others. It is essentially a fighting-dog, and was formerly bred for the brutal sport of bull-baiting, in which its terrible obstinacy usually gained for it the victory. It differs from other dogs in giving no warning of its attack by preliminary barking, and when once it has fixed its teeth into the object of attack, no amount of torture will cause it to relax its hold. Colonel Smith states that he has seen one "pinning down an American bison and holding his nose down till the animal gradually brought forward its hind feet, and, crushing the dog to death, tore his muzzle out of the fangs, most dreadfully mangled;" and there is an instance on record of its returning to the attack on a bull,

after each of its feet had been cut off in succession. The intelligence of this breed has been but slightly developed, and it exhibits little of that attachment to man which characterises other dogs, although it may be said to show a sullen sort of fondness for its master. The Spanish Bull-dog is larger and more powerful than the English breed. The Pug-dog, which in form might be described as a miniature bull-dog, is probably a monstrous variety, rather than a degenerate form, of the bull-dog. It is, however, wholly unlike the latter in disposition, being timid and good-tempered, and is kept only as a pet, for which its dulness of intellect scarcely fits it.

VI. TERRIERS.—These include the numerous varieties of Terrier dog, and the Turnspit. The Terrier is a small but very distinct breed, and is probably one of the oldest dogs



FIG. 11.—Terrier.

found in Great Britain. Three distinct varieties exist in this country, viz., the English Terrier, smooth and graceful in form, with sharp muzzle and erect ears, compact body, strong though slender limbs, and tail carried aloft and somewhat curved—the colour being black, with the belly and extremities usually tan, but sometimes white; the Scotch Terrier, differing from the former in the shortness of the muzzle and limbs, and in the rough wiry character of the hair, which is usually of a dirty white colour; and the Skye Terrier, distinguished by the length and coarseness of its hair, the extreme shortness of its limbs, and the great length of its body. It is of a light brown colour. The Terrier in all its varieties is an exceedingly bold, active, and intelligent dog. It was formerly a regular accompaniment to every pack of hounds, for the purpose of unearthing the fox, and to its eagerness in taking the earth it owes its name. Terriers are now chiefly employed in the destruction of otters, badgers, weasels, and rats, a form of sport into which they enter with the greatest ardour, and in which they show the most remarkable dexterity, a celebrated Terrier having been known to kill 100 rats, collected in one room, in 7 minutes. The Bull-terrier is a cross between this breed and the bull-dog, and is one of the most savage and obstinate of its kind. It was the breed chiefly used in the brutal sports of badger-baiting and dog-fighting, now almost unknown in England. The Turnspit, a monstrous form of dog, is not confined to any single breed. It is figured on the ancient monuments of Egypt, and occurs among the pariah dogs of India and of Paraguay. In Britain, where they seem to be derived from hounds or terriers, there are smooth and rough turnspits, a name which they owe to their having been formerly employed in turning kitchen spits by working inside a wheel, which

when once set in motion forced the dog to continue running. At Caerleon in Monmouthshire, a few years ago, a dog of this kind might have been seen thus employed in the inn kitchen. The turnspit is characterized by great length of body and extreme shortness of limb, the latter being generally crooked.

(J. GL.)
DOGE, a modified form of the ordinary Italian *duce*, from the Latin *dux*, a leader or duke, employed to designate the chief magistrate in the republics of Genoa and Venice. In both cities the office underwent from time to time a variety of transformations, for details on which the larger histories of the republics must be consulted.

In Venice the doge was originally chosen by universal suffrage, held office for life, and was regarded as the civil, military, and ecclesiastical chief. His duties and prerogatives were not defined with much precision, and the limits of his ability and ambition were practically the limits of his power. In 755 his independence was diminished by the appointment of two assistants or *duumvirs*; but this institution was again allowed to fall into the background, and the doge acquired more and more of irresponsible authority, while at the same time the office was usually committed to a member of one or other of the more powerful families. This tendency towards a hereditary despotism was checked in 1033 by Flabeno's law, which reinstated the *duumvirate*, and declared distinctly that no doge had the right of associating any member of his family with himself in the government, or of transmitting his office on his decease. In 1172 a still more important change was introduced; not only was the *duumvirate* replaced by a body of six councillors, but universal suffrage was abolished, and the election of the doge intrusted to a committee of twelve persons, elaborately selected from the members of the great council. On the death of Ziani II. in 1229, two commissions were appointed, which obtained a permanent place in the constitution, and gave emphatic testimony to the fact that the doge was merely the highest servant of the community; the first consisted of five *Correttori della promissione ducale*, whose duty was to consider if any change ought to be made in the oath of investiture administered to the doge; the second was a board of three *inquisitori sul doge*, intrusted with the curious task of examining and passing judgment on the acts of the deceased magistrate, whose estates might be mulcted in accordance with their decision. To minimize as far as possible the influence of individual families, the election of the doge was in 1268 effected by a curiously complex machinery, which remained, with some modifications, till the close of the republic; thirty members of the great council, elected by ballot, selected nine members, who in their turn chose forty; of these forty twelve taken by lot chose twenty-five; the twenty-five were next reduced to nine; the nine elected forty-five; the forty-five were reduced to eleven; and the eleven chose the final forty-one in whose hands lay the actual election of the doge. In proportion to the development attained by the oligarchical element in the constitution, the more important functions of the office were assigned to other officials or to administrative boards, and he who had once been really the pilot of the ship became little more than an animated figure-head, properly draped and garnished. On state occasions he was still attended by all the ceremonial observances of former times: his robe was still purple, the horns of his beretta were still exalted, the sword, the tapers, and the trumpets were borne before him, his leaden seal was affixed to public documents, and the ring was still dropped yearly from his hand in symbolic espousal of Venice and the sea. But he was under the strictest surveillance, had to wait for the presence of other officials in order to open the despatches from foreign powers, was forbidden to leave the city, could not legally