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YOUR DOG AND YOUR CAT HOW TO CARE FOR THEM

YOUR DOG AND YOUR CAT HOW TO CARE FOR THEM

A TREATISE ON THE CARE OF THE DOG AND CAT IN THE HOME

BY

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FORMERLY RESIDENT VETERINARIAN AT THE NEW YORK WOMEN'S LEAGUE FOR ANIMALS



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TO ALL LOVERS OF ANIMALS

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CHAPTER I

CARE OF THE DOG

HOUSING

Freedom of the House .- Even in the most spacious apartments the dog enjoys but limited diversion, therefore he should be given access to all of the rooms in order that he may have the opportunity to get all the exercise possible and have as wide a variety of surroundings as available. There are, however, times when it is necessary to keep him from certain parts of the house. When visitors come, the dog should be forbidden the room unless they are fond of dogs, because so many people possess a great fear or dislike of animals. In case of sickness the dog must not be allowed in the patient's room. A dog should never be left alone in any room where a window is open unless it is provided with a screen of other suitable protection to prevent him from going out on the sill and perhaps falling to the ground. During meals he should be kept from the dining room, and at no time is it wise to leave him alone in a room where

food, especially meat, lies uncovered on the table, since the animal may be tempted to steal. A puppy ought not be confined in a room alone for any great length of time where it is possible for him in his play, or his desire to get out, to damage the furnishings. When a dog is kept in the house it is necessary to air the rooms more thoroughly than otherwise. During the airing process in winter he should be kept out of the room.

Bed.-The dog should be allotted special sleeping quarters rather than be permitted to sleep about on the chairs, beds and other furniture. It is especially important that he never be allowed to sleep with the children. His bed may consist of a small piece of sheeting folded in several thicknesses, of a mat made from table padding, or of any material which can be easily washed. Although he is better without it, a pillow may be placed under the pad if so desired or a box may be partially filled with cedar shavings over which the mat may be spread. Elaborate sleeping baskets are sold at the dog counters which, when decorated with ribbons and covered pillows. make very attractive quarters for the toy dogs. The bed can be placed in any convenient corner so long as it is not in a drait and the dog can have access from it to his pan or paper, should he use either. If the dog is kept in the basement his bed must be raised from the floor in order to protect him from dampness and cold. It will also be necessary to provide much thicker bedding.

Dog House .- For the dog kept out of doors a kennel in which he can sleep and seek shelter from the storms and cold is very desirable. He will be much healthier if accustomed to this exposure. If he is intended to watch the premises he will be of greater value when he is outside, where he can more quickly detect the presence of strangers. The kennel should be as small as possible to accommodate him comfortably, so that when the weather is cold or damp the heat generated from his body will be sufficient to warm the quarters. It should be built of wood, as stone or cement are too cold, and should be so constructed that it may easily be cleaned. When it is not necessary that the kennel be more than four feet high, the roof can be made to lift off, in order to facilitate cleaning. If it is desirable to have it higher, a door can be constructed in one end. In either case a small door should be made for the dog's use, only large enough to permit his passage. This may be protected by a curtain of heavy cloth or by a door suspended on hinges or straps, in such a manner as to allow it to swing in either direction, so that it will remain closed at all times when the weather is cold, but can be fastened open when warm. The floor should be at least three inches from the ground and slant slightly to the front so that water will drain off.

The sleeping box should be raised from the floor eight or ten inches. If made full width of the kennel its construction will be much simpler. The

bottom can be placed on two cleats nailed to either wall. The front is made to slide between two cleats fastened perpendicular to and in front of the front edge of the bottom of the box. In the front a hole should be made of sufficient size to permit the passage of the dog. For winter use a cover can be placed over the box, completely inclosing it except for the small opening in the front. Cedar shavings make the best bedding. They may be placed in the box in abundant quantities, and each time after a floor cleaning handfuls of shavings can be scattered about. The shavings will help absorb the moisture and their odor is of benefit in keeping away fleas.

Cleaning.—The mat on which the dog sleeps should be washed at least twice a week and if necessary, every day. If he uses a pillow this should be aired and shaken up every day. His sleeping box or basket should be sponged off with a disinfectant solution occasionally. The cedar shavings can be changed once a week. The dog house should have a thorough scrubbing, followed by a good disinfecting, every week or two. When fleas are present the cleaning must be more vigorous.

Feeding.—The dog should have a regular place for his meals as well as a regular feeding time. The kitchen is the best place for this. He positively should not be fed in the dining room during the family meals. The pan or plate on which his meals are served should be removed, with any food which is left, within a half hour after feeding. Water

may be put down for him at this time. The dishes should be washed after each meal.

Toilet .- For small house dogs, who attend to their functions indoors, a regular place must be provided for this purpose. A pan or paper, conveniently located in either the kitchen or the bathroom, is the most satisfactory arrangement. This must, at all times, be accessible and, for this reason, the kitchen makes the better place. An ordinary newspaper will suffice and, as soon as it has been used, can be thrown out. A pan filled with either sand or sawdust is often preferred but is harder to clean than the newspaper, and entails more expense. Where this method is used, the sand or sawdust must be thrown out daily, the pan washed and refilled. When the dog uses the roof, a box of sand or ashes may be placed there for him. This can be changed once or twice a week and will save considenable labor in cleaning the roof. For the dog who has a vard to run in, a small area of ground may be spaded up for him. This can be respaded from time to time.

EXERCISE

The maintenance of health depends upon the proper digestion and assimilation of the food material and the free and thorough elimination of the waste products. The assimilated nutritive material is either expended as energy or stored up in the system as fat. If this process takes place with too

great rapidity or if an excessive quantity is accumulated, the system becomes sluggish. As a result, the elimination of waste products is retarded and digestion becomes inactive. When in this condition the animal becomes readily susceptible to disease. If on the other hand the nutritive material is expended in energy such a condition will not develop. Thus to avoid it in inactive animals, exercise must be supplied. To provide opportunity for exercise is the hardest part of the care of the apartment-house doge In the city the street is about the only available place where the dog can exercise.

Street-Harness.-Where the dog is to be taken into the street for his exercise he should be furnished with a harness or collar, a leader and a muzzle. A harness which fits over the shoulders and chest is much more comfortable than a collar. though not as safe. It is suitable only for the small dogs because the large, strong dogs, such %s the collie, pull so hard that the harness, which fits over the shoulders like the collar on a horse, does not give sufficient purchase to control the animal should he desire to get away. For these larger dogs a collar fastened about the neck is much safer. As the dog pulls, the pressure of the collar on his throat tends to shut off his wind and forces him to slow up. The disadvantage of this is that the constant irritation caused by such pressure on a tender throat will induce a cough which oftentimes becomes chronic, if the irritation is continued. The

collar and the harness both are not needed at the same time. They are not only a source of discomfort to the dog, but also very unbecoming, especially when they are out of proportion to the size of the animal and gayly bedecked with brass.

Muzzle .-- In New York and almost all large cities there are laws requiring the use of muzzles while the dog is on the street. Although this law works a great hardship on the dog it is necessary and wise for the protection of the public. The real object of the law is to control the spread of rabies which is disseminated by the bite of a rabid dog. There are many dogs which, because they are naturally vicious and in the habit of biting, should be muzzled. Some dogs, although generally peaceful and harmless, might be provoked to bite if annoved or frightened by strangers. It is to the owner's advantago to comply with the law because if his dog should happen to snap at or bite anyone and the matter was reported to the police, as it always is if a physician treats the wound, the animal would be kept in guarantine as a case of suspected rabies, thereby causing a great deal of trouble and annoyance.

Blanket.—In cold weather it is often advisable to supply the toys and very short-haired dogs with a blanket or sweater. The blanket is, of course, only for street use and should not be worn in the house. Once the dog has become accustomed to it in the fall, it must be worn continually during the

winter, and in the spring as much care and judgment is necessary in leaving it off as we use in discarding our overcoats. Where the blanket is worn intermittently the dog is in more danger of contracting a cold than if he did not have a blanket at all. Leather-covered storm blankets are of exceptional value for use on very cold and stormy days.

Manners .- When the dog is taken out on the street, he should be taught to walk either directly behind or ahead of his companion, rather than allowed to romp at will. It is very annoving to pedestrians to have to get out of the way of a headstrong dog, and as some people do not like dogs or are afraid of them, it is unfair to impose their presence on them. At some time during the exercise period the dog can be taken to a quiet street and there allowed to romp and play for a while. When it is possible to take him to the park the dog will get much more enjoyment out of his exersise. While on the street the dog should not be allowed to come in contact with other dogs, principally because of the danger of contracting disease; and, secondly, because of the great desire of canines to fight. Never let children pet the dog unless he is securely muzzled, for they are often unmeaningly rough and might provoke the dog to bite. Great care should be taken that the dog does not pick up foreign substances, such as stones, sticks, bones and bits of food. The playful puppy is very prone to this habit and should be closely watched. So many dogs are injured by automobiles that every possible precaution should be taken to prevent the dog from being subjected to such accidents.

After the dog has been allowed to run until he has become heated, he must not be permitted to stand in a cold wind. On cold rainy days it is better not to take the dog farther than is necessary for him to clean himself and, on returning home his feet should be washed and his whole body rubbed briskly with towels until thoroughly dry. A dog must not be taken out directly after his bath, except in midsummer.

Roof.—Oftentimes the apartment is so situated that the roof is easily accessible. In such cases this makes a desirable place for exercising the dog. Many dogs may be trained to go to the roof by themselves and, by so doing, they enjoy far greater freedom. Some dogs will play by themselves, deriving much benefit therefrom, but as a rule, those that are closely confined soon lose the desire to exercise unless encouraged. In the excitement of playing, the dog might jump or fall off the roof unless the inclosure is of sufficient height to prevent. During the summertime, it gets very hot on the city roof so that it is impossible for the dog to stay there for any length of time.

Yard.—A dog that is allowed the freedom of a yard will require but little attention after he has become accustomed to conditions. If the proper selection of breed has been made the dog will ac-

quire what exercise he needs within the limits of the yard. That is, if any of the smaller dogs or those of Airedale size are chosen, the ordinary yard will be large enough. But, if a collie, Russian wolfhound, or any of the larger and more active breeds are selected, the yard will be much too small for their needs.

A strong robust animal will soon be acclimated to the exposure and can be left out at all times except during a very hard storm. If the dog lives in his kennel he will be much hardier than the one who spends a part or most of his time in the house. When the dog is first put in the yard great care must be taken, for unless he is used to like exposure he may easily contract a cold. Until he has become hardened he should not be left out for long at a time, unless the weather is warm. In case he is caught out in a cold storm he must be taken into the house and given a hot bath, thoroughly dried and warmed. When the yard is not inclosed by a fence considerable freedom may be acquired if the dog is properly fastened with a chain. A very efficient way is to stretch a wire between two buildings or posts, having a ring on it so that it can slide back and forth. The dog's chain can be fastened to this ring. When the wire is attached to a post, a stick or nail should be fastened to the wire a sufficient distance from the post to prevent the dog from winding his chain about it. The wire should always be fastened so that the dog can

move to his kennel or other shelter and into the shade.

Amount of Exercise.-The amount of exercise required by the dog depends directly upon his size and temperament and indirectly on the amount and character of the food which he consumes. Since the amount of exercise which can be given the animal is determined by existing conditions, the dog should be selected whose exercise needs will conform to these conditions and his food should be regulated accordingly. Small dogs, such as the Pekingese and Pomeranian, need but little out-ofdoor exercise, a walk of five blocks once or twice daily being sufficient. The small terriers of the type of the Boston will require from twenty to forty blocks daily. The Airedale, Collie, and St. Bernard are so large and active that their freedom should not be curbed by a leader. The English Bull, while a large animal, is of such build as to be restricted in movement. If he were to attempt a long hard run he would soon find himself short of wind and exhausted.

However, no set of rules can be laid down for exercising any dog or breed of dogs. It must be remembered that few house dogs receive enough exercise and every owner should aim to get his dog out at every possible opportunity. The opinion of the owner as to the amount of exercise his dog receives varies according to his own desire to walk. Some people think that a five block walk is a great

deal, while others feel that twenty or thirty blocks is very little. Occasionally a person will go to the park and sit on a bench with the dog in his lap and afterward tell of the wonderful exercise the dog receives.

The dog that gets enough exercise and not too much to eat will retain his activity and graceful lines even to old age, while the underexercised and overfed dog grows fat and lazy. Therefore, the best guide is the condition of the dog. Should lie begin to take on flesh, cut down his food and get him out more, stimulate a desire to play and keep him at it till he tires. A rubber ball, a stick, or a strap will help to amuse him and make him take the much needed exercise. In selecting a ball for this purpose, make sure that it is of sufficient size to prevent the dog's swallowing it in his excitement.

Regularity.—Regular exercise is just as in portant as the amount. A five mile walk once a week is not as beneficial as five blocks a day. Occasional long walks instead of invigorating the animal exhaust him and it is several days before he overcomes the effects. A regular daily walk will tend to keep him in uniform condition. When used to this regular exercise he can easily take the longer jaunt without bad results.

Frequency.—The frequency with which it is necessary to take the dog out during the day will depend on whether he uses a pan or paper in the house for cleaning himself. In case he does, he

need be taken out only at the will of his owner, providing he gets sufficient exercise in one trip. The dog that goes into the street to attend to himself must be given frequent chances to do so. Failure in this will result either in an unclean dog or an unhealthy one. Retention of the urine tends to cause a paralytic condition of the bladder which will evidence itself by dribbling of the urine or involuntary passages. The dog should be accustomed to a routine which should not be varied from day to day by any great space of time. He should be taken out the first thing in the morning and the last thing at night in order to shorten the night interval as much as possible. Besides this he ought to have at least two more chances to go out. The morning trip should come before breakfast, as soon as possible after he starts moving about, for that will induce the desire to urinate after his night's sleep. His exercise periods are best given a considerable time after he has eaten in order that digestion may be partially, if not entirely, completed. There should be no reason for the well dog to be unclean with four chances to care for himself in twentyfour hours.

VITAL FUNCTIONS

Relation to Health.—There is no more important duty connected with the care of the dog than giving proper attention to his necessary habits, and yet it is the most often neglected. The maintenance of

health depends as much on the elimination of the waste products as on the intake of food. Almost always the first symptom following a stoppage of the bowels or a retention of urine is a loss of appetite, while on the other hand the movements continue for days after the animal stops taking food. Daily observations of the passages are very essential, and a mental note of their occurrence may be carried from day to day. In case of no movement of either the bowels or urine for forty-eight hours, steps should be taken to locate the cause and remedy the condition. If an abnormal stool occurs for more than two passages it will require treatment. In case of a sick animal it is more advisable to keep a written record of the frequency and character of the evacuations as well as the condition of the appetite. Such a record will be of invaluable aid to the doctor should it be necessary to seek his help.

Feces—Composition.—The feces are composed of the indigestible parts of the food together with the by-products of digestion. The process of digestion consists in breaking up and assimilating the food material and absorbing from the mass that which is of value to the body. As a result of this procedure many poisonous gases and acids are formed. If these ure not eliminated they act as poisons to the body.

The normal stool is cylindrical in shape, varying in size with the dog. It is a congealed mass, of

firm moist consistency, with little or no odor. Abnormal stools are significant of disease and are designated according to their characteristics. A hard, dry passage is called a constipated stool; a thin watery movement is called a watery stool, or diarrhea. When the passage is like a thick, sticky gruel it is termed a pasty stool. A passage consisting of a jelly-like mass which may be accompanied with blood, is mucus from the intestinal coat, and when the blood is present it is spoken of as bloody mucus.

Color.—The color of the movement is altered by the character of the food consumed. When meat predominates, the color is black, cereals produce a brownish stool, and vegetables a slatish-gray movement. Bones cause a hard, dry, crumbly stool of grayish-yellow color. Watery stools are usually black but may be reddish-brown, due to the preseace of blood, or light yellow when the liver is involved. A formed movement may be specked with blood.

Character.—The character of the movement should be noted at each evacuation in order to keep a check on the dog's condition. Any deviation from normal is a sign of intestinal trouble and should receive prompt attention. This is especially important in puppies and weak dogs since intestinal disorders progress with astonishing rapidity and quickly lower the vitality of the animal.

Frequency of Movement.-The frequency of the

movement is dependent on the quantity and kind of food the animal is fed. When the diet consists solely of raw, chopped beef, the amount of fecal matter is very slight, because the greater part of the meat is digested and absorbed. Vegetables contain a large percentage of fiber which is of no food value and is eliminated, making a very bulky and frequent stool. Dogs should have at least one good movement a day but they may have two or three or even more, depending on the character of the food. In cases of diarrhea there may be as many as forty passages a day. Some animals habitually have but one evacuation in from two to five days but such a condition is absolutely wrong and requires attention.

Defecation.—Passage of a normal stool should take place with greatest ease. Straining with a normal passage is evidence of rectal trouble. When the dog is constipated he will strain for some time before dislodging the stool. In case of diarrhea, straining occurs after the movement, due to irritation of the bowel.

Urine—*Composition.*—The urine originates as such in the kidneys, being taken from the blood by a process of filtration. It consists of the waste products of tissue activity which have been collected by the circulating blood. It is of thin, watery consistency, pale yellow in color, and has a slight odor. The quantity of the urine varies with the size of the dog and the nature of the diet. In medium-

sized dogs there is from one-half to one and a half pints of urine a day. The frequency of urination depends upon the number of opportunities provided. The well-trained house dog will hold his water for twenty-four hours, if necessary. Dogs having their freedom will urinate as frequently as a post presents itself for use.

Character and Quantity.—The character and quantity of the urine is changed in many diseases, but for all ordinary purposes the regular passage is all that need be kept in mind. The abnormal conditions which must be recognized and attended to are: Frequent attempts at urination followed only by the passage of a few drops; urine of a dark, dirty brown color; frequent passage of large quantities of urine; and absolute stoppage of urination. When the urine is passed but once or twice a day the odor is often increased and its consistency becomes thick and viscid. Such urine frequently stains.

COAT

The proper care of the coat is of great importance since the beauty of the animal is in so many breeds dependent on the condition of the hair. Many people are attracted by long-haired dogs solely because of their beautiful luxuriant coats. Needless to say, in these types a ragged, scrawny coat detracts much from the value of the dog. The condition of the coat is indicative of the physical

condition of the dog and is evidence of the care it receives. In certain debilitating diseases the hair becomes coarse, dry, rough, and lusterless. In puppies suffering from digestive disturbances, worms, rickets, and distemper, the coat becomes unthrifty. This condition is seen in old dogs affected with malignant tumors, malnutrition, and chronic febrile diseases. In all skin diseases the hair loses its tone and starts to fall out. In healthy animals if the hair is given proper attention it is bright, glossy, soft, and full of tone, but if neglected or improperly cared for, it becomes dull, harsh and brittle.

Description of the Coats.—There are three types of coats, determined by the length of the hair and its texture. These are: (1) The short-haired or smooth-coated dogs, such as the Boston Terrier; (2) the wire-haired, such as the Airedale, and the long-haired, such as the Collie.

Short-haired Coat.—This is made up of short, straight hairs of equal length which lie smoothly on the surface of the skin. In texture it may be either fine or coarse, but never as rough and harsh as the wire hair. The finer and shorter the hair the greater is its gloss. Such a coat requires a minimum amount of tare to keep it in shape. Except where the color is white it does not need frequent bathing because the dirt can be easily removed by brushing. This coat does not have to be clipped and the shedding process is short and not especially annoying. The dog's appearance is

always good and it takes but a short time to put him in shape for showing.

Wire-haired Coat.—The comparatively short hairs of this coat are of coarse, harsh texture and somewhat wavy but not curly in appearance. The hair may or may not be dense but is rough and wiry. As a rule, this coat is impervious to water and bathing is difficult, consequently it has to be cleaned largely with the brush. These dogs are never clipped but shedding is helped by plucking out the dead hairs.

Long-haired Coat .- There are two types of long-haired coats, differing only with the presence of the under coat. Setters and Spaniels have but one long outer coat, while Collies, Chows and Pomeranians have in addition a short, woolly undergrowth. The long hairs are soft and silky and have a tendency to wave or curl. The under coat consists of short, stiff, curly hairs which are thickly placed. The coat is soft, oily and glistening. It has a habit of matting down, forming a thick pad which serves as a protection against cold and storm. To keep this coat in condition it is necessary to give it frequent combing and brushing. Because of the difficulty in removing the dirt by this method the dog must be washed quite often, but this must be avoided as much as possible since it is very hard to dry the hair properly. The shedding process is prolonged, and about the house the dogs are on this account a great annoyance. Clipping is sometimes

desirable for the comfort of the animal but it often spoils the coat. Skin diseases are very prevalent in long-haired dogs.

Cleaning the Coat.—Smooth-coated dogs can be efficiently cleaned by brushing and combing. For this purpose an ordinary hairbrush will suffice. The hair should first be stirred up with a vigorous brushing and finished by smoothing it in the direction it should naturally lie by alternate strokes of the brush and the hand. The gloss may be improved by wiping the hair with a cloth dampened with oil.

For the wire-haired dogs a stiff brush with long hard bristles is best. The hair can be thoroughly cleaned by haphazard strokes of the brush in all directions. Brushing the coat in the ordinary way will soften the hair and make it lie smooth, a condition which is not to be desired in dogs of this type. After a thorough brushing the coat cair be given a hand massage which will rough up the hair. Oil should never be used on this coat.

Long-haired dogs must be first combed to remove the snarls, the dead under coat, and the loose hairs. It may then be thoroughly brushed with a heavy, stiff bristled brush and finished with a light soft brush. The oiled cloth will add to the gloss but cannot be used in all types. When a ruff is desired it can be worked up with the hand or brush last.

Bathing.-Too frequent bathing is more detrimental to the coat than not enough. It irritates the

skin and causes eczema. In winter it chaps the skin and makes it rough, cracked, and sore. It removes the natural oil from the hair and leaves it dry and harsh. It weakens the animal and paves the way for bronchitis, pneumonia, and distemper. White dogs must necessarily be bathed more often than those of dark color, and lap dogs more frequently than those running in the yard. The actions of the individual determine, to a great extent, the frequency of the bath. Some animals are naturally clean and take great pride in keeping their coats in fine condition, while others delight in rolling in all the dirt to be found. The average house dog should be washed once in two weeks, but when it is possible to stretch the interval to a month it is wise to do so. White dogs and toys will have to be bathed from one to seven times a week.

Dogs should not be bathed when suffering from any febrile disease. When there is any upset of the intestinal tract baths should be avoided. Very thin and emaciated dogs are in a too weakened condition to withstand bathing. Puppies, unless vigorous and healthy, should not be washed before they are at least four months old. Females must not be bathed while in season.

Soap.—Any good white soap such as Ivory, Fairy, and Marseilles may be used. If the skin is sore it is advisable to use pure Castile soap. Scented toilet soaps, liquid shampoo soaps, and tar soap are allowable. Medicated soaps are not necessary and

are apt to irritate the skin. Strong alkaline soaps are detrimental to the hair because of their oil solvent action. Liquid soaps are more convenient and cake soap may be reduced by cutting it in fine pieces, and dissolving in boiling water.

Bath .- Puppies are usually frightened during their first bath and will try to get away. If badly handled, they will always fight their bath, hence great care must be spent in getting them used to the procedure. The dog should be placed in a dry tub and accustomed to it. His face and feet can be washed first, with water from a basin. As he becomes used to the water it can be poured into the tub, little by little, until there is sufficient for the bath. The hair of the body can be saturated by scooping the water up by the hand. Dogs that like the bath may be induced to lie in the water, or it can be poured over them with a dipper. After the hair is saturated, the soap can be applied, the lather being thoroughly worked through the hair to the skin in order to dislodge all of the dirt. The soap is then washed out and the dog thoroughly rinsed with clear water. The first water should be hot and the rinsing water cooled as much as the dog is able to stand. If the bathtub is used the water can be gradually cooled by the shower arrangement. The first bath should be made as short as possible, both because of the dog's fear and the danger of his contracting a cold.

Drving .-- Now comes the hardest part of the job. The thoroughness with which the dog need be dried will depend on the kind of animal he is and the condition of the weather. The small toys must be absolutely dry, while in the large strong dogs only the bulk of the water need be removed. In winter, drying is more important than in summer. The hair is first squeezed with the hands until all of the water possible has been removed and then towels are used to absorb the moisture, one after another, as fast as they become wet. If they have been previously warmed so much the better. The rubbing should be continued until it is impossible to dampen a towel, then the hair may be rubbed with the hands until the dampness disappears. The snarls are now removed with a brush and comb and if the dog is a long-haired toy he should be rolled in a blanket. and if the weather is cold he may be placed by the radiator. After he is warm, unwrap him and make him run briskly about the house. He should not be taken out of doors until the next day, unless the weather is very warm. In midsummer the sunshine and air will help to dry his coat but some of the more fragile dogs cannot withstand even this exposure.

Clipping.—Clipping spoils the coat for some time. The texture of the hair is rarely as fine and silky after it has been cut. The hair is dull and stiff and does not lie as smooth as before. There are, however, times when it is necessary, or at least ad-

visable. When the dog is affected with any serious or extensive skin disease, the speed with which it is cured depends upon the thoroughness of the application of the remedies. It is almost impossible to work an ointment or lotion into all parts of the skin when it is covered with a heavy coating of hair. In such conditions the hair usually comes out before the cure is obtained, and the new growth of hair following such a disease is of about the same texture as it is after clipping, so there is no particular disadvantage in removing the hair at the beginning. Large fat dogs suffer greatly in summer if covered with a heavy coat, and it is more humane to remove it.

The coat may be entirely removed, and in the treatment of skin diseases this is necessary, or it may be clipped according to the prevailing fashion for the breed in question. The clipping should be done by one who is experienced with the operation and one who is kind and careful with the animal. Even the most skilled sometimes scrape or cut the animal. The most important precaution is to find a man who uses care in keeping his instruments clean. Dirty, unwashed clippers are frequently responsible for the spreading of mange and ringworm. In case it is known that the animal is suffering from a contagious disease the clipper should be so informed, in order that he may exercise care in cleaning his instruments after clipping the dog. After the hair has been

removed the dog should be thoroughly anointed with an antiseptic oil and later given a good hot bath. If there are any cuts or scratches these should be painted with iodine and smeared with borated vaseline.

Oiling the Hair.—In those dogs where a fine silky coat is desired it is well to add to the natural supply of oil, especially if the dog is frequently bathed. Puppies are often slow in developing a coat and oil will help its growth considerably. As a result of skin diseases the hair is usually dry and dull, and after clipping it is apt to be stiff and hard; if oil is supplied it will hasten the recovery of the coat.

There are two ways of applying the oil. It may be liberally smeared over the body a half hour before the bath. In case the hair is especially dry the bath may be postponed for twenty-four hours. This should not be done, however, in very frail animals if the weather is cold. A better procedure is to apply the oil after the bath when the hair is thoroughly dry. The oil is massaged into the hair with the hands. After the application has been made the hair is rubbed with a dry cloth to remove the excess. Oil may be applied in this way at frequent intervals.

The oils to be used are: Cocoanut, olive, and mineral oils, white or light amber vaseline. Crude oil may be used if a good quality can be obtained.

Cottonseed oil is good for the hair but is quite sticky. Sulphur may be added to the oil if the skin is at all inclined to be red.

Теетн

Number—Puppy Teeth.—There are thirty-two puppy or milk teeth, consisting of six incisors or front teeth, two canine or corners, and eight molars or grinders on each jaw. The process of eruption begins at about the third week and usually extends over a period of two weeks so that at five weeks all of the milk teeth should be through. They erupt rapidly, as a rule, giving no trouble.

Permanent Teeth.—The permanent set consists of forty-two tecth arranged the same as the puppy teeth, with the addition of four large grinders on the upper jaw, and six on the lower. Their eruption begins about the third or fourth month and is usually completed by the time the dog is seven months old.

Eruption.—During the process of teething the gums become very red and swollen and there is an increased flow of saliva. In some cases the inflammation is intense and there is a loss of appetite and occasionally convulsions. It frequently happens that the second incisors and canines come in before the puppy teeth drop out and unless the latter are removed they will force the new teeth to one side and themselves become permanent, leaving the dog with

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a double set of teeth; this is very unsightly. It is difficult to extract these teeth, because of the long root which is firmly imbedded in the jaw, and unless great care is exercised in their removal, the tooth may be broken, leaving the root for further trouble.

Tartar .- Ordinarily a dog's teeth require no attention, but owing to the abnormal condition under which we are keeping the house dog to-day, much trouble is arising from their neglect. Tartar is a calcareous deposit on the neck of the teeth at the border of the gums. It is a gray, yellow, or brownish color and is hard and brittle in composition. On accumulating in sufficient quantities, it pushes back the gums, laying bare the root of the tooth, which is thereby loosened. The food starticles are deposited about it, causing irritation and decay. The tartar accumulation may be prevented by cleaning the teeth occasionally with water, using cotton swabs as a brush. Plain water, a solution of table salt, bicarbonate of soda, or hydrogen peroxide may be used. The peroxide tends to dissolve the tartar, making its removal much easier. Some of the tooth powders used by man are often applied, but with more or less difficulty. After a large deposit has formed it must be removed by means of special instruments. This is a slow, techous process and one which the dog will surely resist. After the tartar has been removed the gums frequently need treatment, especially where they have receded. For this

purpose solutions of permanganate of potash or boric acid are best.

Toothache.—There is no reason to believe that dogs do not suffer from toothache as well as man, since the same pathological conditions are found in both. Of course, the nervous mechanism of the dog is not so acute as man's, nevertheless, pain in many cases can be demonstrated. A painful tooth can be detected by tapping it gently with a metal object; this causes a sharp throb of the jaw. The cause of toothache is decay of the tooth, decay of the tissue around it, or abscess formation at the base of the root.

Decayed and Loose Teeth .- The teeth of the dog are not so subject to decay as are the pockets in which they are included. However, in cases where the tooth is broken, laving bare the sensitive structures to the influence of infection and food, the tooth will commence to decay. Inflammation of the lining of the pockets in which the teeth are' placed comes about through receding of the gums, due to tartar formation. As the condition progresses the teeth loosen and finally fall out. Abscesses may form at the base of, the root, causing the inflammation to start at that end. These abscesses often break through the jaw, causing fistula. In this condition surgical intervention is necessary and the sooner it is applied the fewer teeth will be lost. In toy spaniels, especially, the front teeth

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loosen at a very early age and in spite of rigid treatment are often lost prematurely.

EARS

The ears of dogs are subject to a very annoying disease known as canker. The condition is a form of eczema and is preventable, providing proper care is given the animal. There is in the ear a normal secretion of wax, yellow in color, thick and sticky in consistency. Its purpose is to keep the membrane oily and act as a protector. Under certain conditions the membrane of the ear becomes inflamed and the secretion more abundant and of a different character. It may be thin, yellow, and sticky, or mixed with pus, but ordinarily it is brownish black, thin and sticky or thick and dry. The condition is brought about in the same way as ordinary eczema, but sometimes is due to a parasite like that causing mange. If the system of the dog is out of condition on account of improper feeding and lack of exercise, if the vitality is lowered by some debilitating disease, or if the wax of the ear has been dissolved by the application of soapy water, then the membranes of the ear become inflamed by the presence of some irritating substance and the discharge makes its appearance. Canker of the ear is painful and irritating, and forces the dog to scratch his ears so much that he often inflicts wounds on the ear and adjacent skin.

To prevent a canker from forming it is necessary to clean out the ear occasionally. This is best accomplished after the bath in order that no water may be left in the ear. A swab can be made by rolling a piece of cotton around the end of an orangewood stick or a match. A toothpick should not be used because it is too sharp and might injure the ear. By means of the swab the outer canal of the ear can be cleaned of dirt, discharge, and water, and then an antiseptic talcum powder or dry boric acid can be dusted into the ear. In animals that have been troubled with canker it is well to plug the ears with cotton previous to the bath, after which the ear may be cleaned. If the trouble has already developed the treatment may be carried out in the same way, but if the disease does not readily respond, more vigorous methods must be employed.

EYES

The eyes of some dogs, especially toy poodles, habitually discharge a watery secretion which stains the hairs beneath a brownish color. Such eyes should be washed daily with hot boric acid solution. The stain can be removed from the hair by the application of hydrogen peroxide. The membranes around the eye and sometimes the cornea of the eye becomes inflamed in connection with a cold or with distemper. For this the hot boric acid may be used several times a day and in addition one or

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two drops of a weak solution of argyrol may be put directly into the eye. Cats when fighting with dogs invariably aim for their eyes and usually succeed in inflicting an injury. This may be treated at very frequent intervals with boric acid, or a piece of cotton saturated with the antiseptic may be tied over the eyes until aid can be summoned. Pekingese and Japanese Spaniels have such prominent eyes that it is not a rare occurrence for the eye to be forced out of the socket. A veterinarian should be called as soon as possible to replace the eye, but in the meantime it should be thoroughly washed with cold water and then covered with a pack of cold boric acid.

NAILS

The nails of some house pets grow much faster than they can be worn down with the limited exercise the animals receive; consequently the nails must be occasionally clipped. On the hind legs of many dogs are extra toes, called dewclaws, and since these toes do not touch the ground there is no wear on the nails and they frequently grow so long that they penetrate the skin on the foot-pad. This condition is known as ingrowing nails. It is exceedingly painful and should not be allowed to occur. The nails may be regularly filed with a nail file or clipped with heavy shears. In cutting the nails, one should avoid penetrating the sensitive

structure inside the nail. The nail can be snipped off a little at a time until the dog shows evidence of discomfort. Should the sensitive toe be cut it must be dressed with some antiseptic for a period of twelve hours.

CHAPTER II

MEDICAL CARE

Sooner or later, the owner will have occasion to give his dog medical attention, either on his own initiative or following the doctor's instructions, therefore, a knowledge of how to proceed will be of value to him. The successful treatment depends almost as much on the efficiency of the care and nursing as on the medication. It is surprising how few people know the simplest facts concerning the care of a sick animal.

Administration of Medicines

There are various ways by which medicines may be given. The most common route is by way of the mouth.

Oral—*Liquids.*—Many dogs object to taking medicine, especially when it is in the form of a liquid. With these animals it is necessary to use force and an assistant is needed to help with the operation. The dog should be placed on a table in a sitting position with his back next to the assistant's abdomen. The assistant should then grasp the forelegs of the dog with his hand of the corresponding side, allowing the arms to press lightly

along the dog's ribs. Under such restraint the dog will be unable to move in any direction. If only a small quantity of liquid is to be given a spoon may be used, but for larger quantities it is better to provide a bottle. A suitable dosing bottle may be made by fitting a piece of rubber tubing about two inches long over the neck of a one ounce bottle. The purpose of the tubing is to avoid getting the bottle too close to his teeth so that if he should bite he would get the tubing rather than the bottle.

When the dose has been prepared, grasp the lip of the dog at the extreme right hand corner of the mouth with the left hand and pull outward and upward in such a way as to form a pouch of the cheek. Take the bottle in the right hand and pour a small quantity of the liquid into the pocket. If the dog refuses to swallow after a reasonable length of time, pinch the nostrils so as to shut off his wind. This will usually induce swallowing, but the more stubborn dogs will hold out until they are forced to cough. With this event it is necessary to free the animal quickly and wait until he is again breathing freely. The operation may then be repeated by introducing small quantities of the medicine at a time until all has been taken. Beginners are bound to lose a part of the dose in the first attempts, but it is possible, with practice, to administer to the most obstinate, the bitterest of doses. In the case of oil or any medicine where the dose is elastic, more can be given to make up for the

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loss, but with strong drugs it is better that the dog get the small dose rather than take the chance of an overdose.

Tablets .- In giving capsules or tablets the manner of holding the mouth for receiving the medicine is slightly different. Grasp the upper jaw from above with the thumb and forefinger of the left hand and press the cheeks against the gums just back of the corner teeth; this will force the mouth open. The tablet is then placed as far back on the tongue as possible and after quickly withdrawing the hand, the mouth is tightly and rapidly closed. The jaws are held shut to prevent the dog from chewing or working the tablet forward with his tongue. After he has swallowed a couple of times examine the mouth to be sure he has the medicine. The tablet may be put in the mouth with the fingers, a pair of thumb forceps or a spoon. The spoon, which is more universally used in the house, must have a handle which curves upwards, otherwise the tablet will slide off too easily. Grasp the spoon by the bowl and place the tablet in the curve of the handle. In carrying it into the mouth press down the tongue, so that the tablet will roll back over its thickened portion.

Powders.—Powders that are soluble can be dissolved in water and given with a spoon or bottle. Insoluble powders are dusted into the mouth far back on the tongue.

The most usual cause of failure in giving medi-

cine is the lack of firmness and determination on the part of the operator. The least struggle by the dog usually wins his release and he soon learns that he does not have to take the dose if he only puts up a little resistance. A dog to be desirable as a pet should be under the control of his master for his own good as well as his owner's, and the man who has been intimidated by his dog had best dispose of him. Discipline does not entail hardship for the dog but makes his relation with his owner much more agreeable.

Medicine Given in the Food.—When small quantities of medicine without a disagreeable taste are to be given, and the time of administration is at the regular meal hour, they may be put in the food, unless it has been otherwise directed. Liquids and powders are mixed with the food, and tablets concealed in a small ball of meat. It is often desirable to give tablets in this way at other than meal time and there is no harm in the procedure, unless for some reason the dog should not have food.

Special Rules Governing Medicines.—Castor oil is difficult and dangerous to administer. Cold oil is thick and pours hard, but if the dose bottle containing the oil is immersed in hot water for a few minutes it will flow much more freely, and by the way, the action will be quickened. When mixed with syrup of buckthorn it is more pleasant to take, but its action is more drastic. Care must be taken in its administration that the dog does not choke

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and inhale some of the oil, for if it should get into the lungs it will set up a violent, if not fatal, pneumonia. After giving oil, no water or food should be allowed for several hours since vomiting would be induced and the action of the oil lost. Some dogs cannot stand castor oil and immediately vomit it. In these cases it is better to use some other purgative, but if the oil must be administered it should be in small and repeated doses. When giving any of the salines such as epsom salts, citrate of magnesia, or milk of magnesia, water will aid their action and should be given freely, unless the dog is vomiting.

No medicines containing carbolic acid, mercury, arsenic, or strychnine should be given, except under a doctor's direction, and when these or any other strong remedies are used they should be stopped immediately if the bowels or kidneys fail to function.

Rectal.—Treatment is given through the rectum to relieve constipation and remove foreign bodies, to overcome inflammation of the rectum and anus and to administer food. The principal means are enemas and suppositories.

Enemas.—An enema to relieve constipation is prepared by dissolving Castile soap in hot water, to which a little glycerin may be added. Sometimes castor or mineral oils are used. The amount to be given depends on the size of the dog; in toys and puppies, one to four ounces is sufficient, while in large dogs, as much as a pint may be given. For

ordinary purposes, one ounce for toys and four for the larger dogs is the proper dose. In the case of small amounts an infant's rectal syringe is convenient to use; for larger quantities an ordinary douche bag is best. For high enema a piece of soft rubber tubing, six or eight inches long, may be placed over the hard rubber tip. A glass tip should never be used. Before the tip is inserted in the rectum it must be lubricated with oil or vaseline. It should not be forced, but slowly and carefully worked into the rectum. The liquid should be allowed to enter the rectum slowly, and the flow stopped when the animal begins to strain. After giving the enema the dog should be placed where he can void the fecal matter without fear. When the dog uses his pan or paper he can be given the enema near it, but if he is an out-of-door dog and conditions are such that he cannot go out, he can be placed in the bath tub. In giving a high enema the lower bowel should be emptied first, and then the soft rubber tube put over the tip and worked as far up into the bowel as possible without using force.

For feeding purposes eggs, milk, broth, meat juice, and gruels are used. The food should be heated to a little above body temperature and given in small quantities and slowly, in order that they may be retained. The rectum must first be emptied of fecal matter with a soap enema and then washed out with a weak salt solution—a teaspoonful of table salt to a cup of warm water.

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Suppositories.—Glycerin suppositories are used when a normal stool is formed but retained because of fear, pain, or stagnation of the rectum. The regular infant's size is adaptable for canines. In absence of these, serviceable suppositories may be fashioned from a piece of castile or ivory soap about the size of a lead pencil and about one inch in length. They should be made smooth and blunt to facilitate insertion. If moistened with water just before they are used their insertion will be easier. Medicated suppositories are often used in the treatment of inflammation of the rectum and anus.

Inhalations .- Although not used to any extent in canine practice, because of the dog's intolerance and the difficulty of administration, inhalations are sometimes of great value. In cases of cold in the head, sore throat, or bronchitis, where the membranes are dry and irritated, steam inhalations have a marked soothing effect. The method of application is simple, but difficulty is met in getting the dog to submit. To a pint of boiling water the prescribed remedy is added, placed in a dish which will not easily tip over. The dog's head is held over the dish and usually a second person will have to assist in keeping him quiet. A towel is drawn over the dog's nose, so as to exclude the eyes, and is allowed to fall about the dish. The steam arising from the dish is collected under the cone shape of the towel and directed to the dog's nose. If he resists the first attempts too strongly, it will be

better not to force the matter, but desist till later, when another attempt can be made.

When a dog is unconscious following a fit or a fall, he may be quickly revived by the fumes of aromatic spirits of ammonia. A piece of cotton saturated with the ammonia is held to the nose. If the dog is not breathing, artificial respiration must be forced by pressing the chest at regular intervals.

Vaginal.-The introduction of foreign substances into the vagina is attended with great danger and should not be attempted by any one not thoroughly familiar with the operation. Those who breed dogs, however, will be frequently called upon to douche their bitches and a knowledge of the procedure will not come amiss. All water used should be boiled and the douche bags, pans, etc., thoroughly cleaned. The hair and skin around the vagina must be well washed to rid it of any dirt or discharge. The hand of the operator must be absolutely clean. The dog is held by an assistant with one hand on the neck and the other under the abdomen. The douche bag may be held by a third person or fastened about two feet above the animal. Plain boiled water may be used or table salt may be added in the proportions of a tablespoonful to the quart. This should be as hot as the hand can comfortably bear. The end of the tube is lubricated with olive oil or vaseline and inserted into the vagina from one to two inches and a part of the solution used. After this has been forced out, more is allowed

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to run in, and the operation is continued until the douching is completed. The forequarters of the dog are then elevated and the abdomen massaged backwards in order entirely to empty the vagina. For small dogs a pint, and for larger dogs up to two quarts, of solution are needed to cleanse the vagina.

External Applications—For Skin Diseases.— Medicines for treatment of skin diseases are applied to the skin in the form of oily lotions, ointments, watery solutions, and powders. Alcoholic solutions were formerly used extensively and were of great value, but, their use has been curtailed because of the prohibitive price of alcohol.

The character of the lesion determines the kind of an application most suitable. Moist lesions require drying drugs and dry scaly sores need oily solutions or ointments. In acute conditions nothing but the mildest of remedies should be used, while chronic sores require the stimulation of irritating remedies.

The method of application depends on the character and extent of the injury. On small acute lesions such as burns, an ointment should be thickly smeared over the surface, exercising care to avoid injuring the skin. On old chronic sores the lotion should be well rubbed in since the massage helps to stimulate repair. Remedies strong enough to destroy mange must be applied sparingly because of the nature of the drug, but well rubbed in, for the

parasites are found in the deep layers of the skin. If the whole body surface is involved, only a portion of it, say a third, should be treated at a time, because of the danger of absorption and because oily solutions, in particular, when applied over the entire body surface lower the vitality of the animal.

For Underlying Conditions .- Edema of the skin, bruises of the muscles, strains of ligaments and tendons, fracture of bones, rheumatism, and paralysis are treated by the application of water, liniments, lotions and massage. Cold water may be applied by bathing or by packs. The packs may be laid over the region at frequent intervals or bound to it. Ice bags are often used when intense cold is desired. Heat is applied by wringing towels from very hot water and applying them to the injured part. To be of value the water must be just below boiling, so that it must be squeezed from the towel with a dipper or other metal tool, and the towel applied as soon as it can be held in the hands. Another towel should be in the water, ready to be applied as soon as the heat is gone from the first. A flannel should be put over the part after the steaming is completed.

Liniments and lotions are applied to injured parts either for their rubefacient action or to dull the pain. Massage is of value in chronic conditions where the blood supply is deficient. This may be applied by rubbing the parts or picking at the skin with the hands, or using the vibrator.

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THE USE AND ABUSE OF MEDICINES

Medicines are of untold value in the treatment of disease, but they have their limitations like everything else. The knowledge of the properties and actions of drugs and their correct application in the treatment of disease involves a very extensive study which can only be mastered by those who devote themselves wholly to that work. The idea that certain drugs cure certain diseases is false, for only in a few exceptional cases is there any drug specific for a certain condition, nor is there any group of drugs which is applicable to all cases of the same disease. Nevertheless, the sale of proprietary cures is a very flourishing business. The correct treatment of a disease consists of eliminating the cause, lightening the work of the defective organ, and facilitating the work of nature in perfecting the repair, in conjunction with such remedies as will best aid the process. The irrational use of medicines without a knowledge of why they are given tends to defeat the purpose for which they are intended. The design of the modern practitioner is to prevent disease rather than merely to cure sickness. The Health Department and the Bureau of Animal Industry consider their work to be the prevention of disease rather than the cure. Those who are entrusted with the care of animals are in closer contact with them and are in a better position to carry out these plans. To accomplish this successfully,

will require a sufficient range of study and amount of work to absorb the time and thought of the ordinary person, without assuming the responsibilities of administering drugs about which he has no knowledge.

Many bad practices have sprung up in the canine field which ought to be corrected. Castor oil is our best remedy for cleaning out the intestinal tract, but the habitual use of it at regular intervals is a bad practice and tends to lessen its effect on the system. If the animal is kept right and fed right there is no need of regular purgation, and even when it is needed, recourse should be had to milder remedies which will have a more lasting effect. Cathartic pills are even worse than castor oil. Following their repeated use a habitual constipation develops, which is difficult to overcome.

The idea generally prevails among dog owners that all dogs are infested with worms and must be regularly treated for them. While worms are more or less prevalent among dogs, the disasters resulting from them are less than from the violent action of some of the remedies which are given to remove them. The purging of dogs with drastic worm medicines is always attended with grave danger and should be carried out only by those thoroughly familiar with the action and dosage of the remedies given.

A large percentage of skin diseases is due to dietary disorders and intestinal diseases rather than

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to mange parasites. Treatment of these conditions depends, therefore, more on the correction of the underlying condition than on the external application of skin lotions. Remedies sufficiently strong to destroy the mange organism are far too violent for other skin disorders. To overcome or prevent these conditions it has become a quite general practice to put sulphur in the drinking water. While sulphur is of unquestionable value in treating these conditions, its administration in this manner is inefficient because of the fact that it is not soluble and except for the odor it imparts to the water has no effect.

At the present time there is no known distemper cure. Treatment of this disease depends to a great extent on hygiene, intensive feeding, and careful nursing. Such medical treatment as is used must be directed toward the abnormal symptoms present in the individual case. No stock preparation can be depended upon to carry out these intentions. The use of serum has become quite extensive and in the hands of a veterinarian who understands its actions and indications, this type of medication may prove of much benefit.

HOME TREATMENT

It is neither possible nor necessary to call professional aid for all of the dog's minor ailments providing the owner is capable of discerning between minor conditions and those of grave importance.

This faculty comes more from experience than from any other source. There are, however, many ways by which the severity of an illness may be judged. A clinical thermometer is a very valuable adjunct to the household. A dog sick enough to carry a temperature of 103° F. or above is too sick for one to take chances with his recovery. In many diseases the appearance of a fever may act as an indication of when to stop home treatment and seek the help of a doctor. A cold in the head is not dangerous until a fever develops, but on its appearance, bronchitis, pneumonia, or distemper may be expected. Constipation should respond to home treatment, but failure to get results in seventy-two hours or the appearance of a fever indicates that the condition is of grave importance. When a diarrhea does not respond in a few days to ordinary treatment or when it is accompanied by fever. the case should be given outside aid. Vomiting should not be allowed to persist for any length of time. Simple wounds may be treated by ordinary antiseptic methods unless the presence of fever sends forth warning of approaching blood poisoning. Fractures, injuries, and convulsions require first aid, but should later be given expert care. The problem which confronts the owner is a knowledge of his own limitations and a willingness to admit his shortcomings. Better than to wait a few days to see if a condition will not improve, is an unnecessary trip to the doctor. The money thus spent in-

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creases your knowledge of your dog and is a good insurance against a possible loss.

HOSPITAL

Too many people are possessed of the idea that as soon as their dog is taken sick he must be put in a hospital. Nothing could be further from the truth. The trouble usually lies in their unwillingness to spend the time and trouble needed to nurse their pet. There are conditions which cannot be taken care of except where the facilities of the hospital are afforded. Operative cases, those requiring skilled nursing, or those hovering between life and death, are essentially hospital cases. Dogs which are suffering from the ordinary ailments are far better off at home under familiar surroundings and with familiar people than they are in strange places. They can be given much more individual attention at home than in the ordinary hospital.

HYGIENIC TREATMENT FOR THE SICK

Quiet, absolute cleanliness, fresh air, a suitable temperature, good food, and last, but not least, companionship, are needed for the sick dog. He should not be forced to exercise when he is unwilling or unable to do so. If it is necessary to take him out of doors to clean himself do not go farther than the occasion demands. It is better to try to induce him to use a paper indoors. Where there are stairs to climb he should be carried if possible. Such conservation of energy will prove valuable to him.

The dog and his quarters should be kept absolutely clean. Tub baths must be avoided, because they are weakening and expose the animal to colds, but any soiled parts can be sponged with hot water and thoroughly dried. His bed should be kept clean and fresh. His food should be freshly prepared at each offering and should be clean and wholesome. If the appetite fails, the dog can often be tempted to take food from his master's hand, when he would not touch it in a dish.

The air in the room should be frequently changed and the temperature kept moderately warm and even. No drafts should be allowed to strike the dog. His general comfort in every way should be provided.

The sick dog should not be shut up in a room and left to his own devices, nor should he be put away in strange surroundings unless absolutely necessary, for an unaccustomed change will sometimes work havoc with a sensitive dog. The animal enjoys seeing his master and relies upon him to help him in his trouble. A word and a pat are worth more than drugs in curing many an ailment.

CHAPTER III

COMMON DISEASES OF DOGS

DIGESTIVE DISTURBANCES

Indigestion.—Indigestion results from the partial or complete failure of the digestive organs to function. It occurs most frequently in puppies and young dogs and especially in those whose vitality is low because of some debilitating condition, such as rickets or worms. Poodle, Pomeranian, Boston Terrier and Collie puppies are the breeds most commonly affected.

Cause.—Improper food: milk, potatoes, rice, cornmeal, sloppy foods and doughy masses; overfeeding: large quantities of bulky starchy foods and slops. Catarrh of the stomach and intestines, and constipation help to induce the condition.

Symptoms.—In mild attacks the dog shows uneasiness after eating a large meal, runs about the room, occasionally lies down on his belly with his head on his forefeet stretched before him, rolls on his back with his feet in the air, crouches down with his head and forefeet low, and his hind parts high in the air. He may cry at intervals or he may keep it up continually. The abdomen is distended and painful. Short mild attacks may occur for several days without attracting attention. The appetite

will, however, gradually fail. By that time the trouble will be aggravated by a small quantity of food.

Severe attacks may follow a series of mild ones or may occur suddenly after the ingestion of a particularly offensive meal. The dog becomes very restless, runs about in frenzy, throws himself violently to the floor, only to get up immediately and run about again. The dog will shriek, at times constantly. The abdomen is very much distended, hard and painful. Unless the dog is given prompt attention, a severe attack will soon turn into a case of intoxication which is manifested by convulsions and depression. In neglected cases death soon follows.

Prevention.—Indigestion may be prevented only by proper feeding. Few cases will occur in dogs given a concentrated nutritious diet. Milk is almost invariably the cause of indigestion. Dogs that are not doing well should receive careful attention to eliminate or overcome the cause, whether it be worms, rickets, or poor food. If the bowels are sluggish they should be corrected.

Treatment.—With the first symptom of indigestion the doctor should be called. First aid treatment will consist of causing the dog to vomit through the administration of a large dose of table salt or a teaspoonful of mustard in hot water. After vomiting occurs the dog may be given a small dose of castor oil.

Common Diseases of Dogs

Inflammation of Stomach and Intestines.—There are many forms of gastro-enteritis, depending on the severity and character of the causative agent. The inflammation may affect only the stomach or any region of the intestines, or it may involve the entire tract. In all cases the symptoms are about the same and without great experience it is impossible to diagnose the exact location.

Cause. — Improper food, overfeeding, worms, foreign bodies, obstructions, and poisoning, either by drugs, spoiled food or toxins arising from faulty digestion. Gastro-enteritis may be associated with indigestion, intoxication, distemper, or rickets. A mild inflammation of several days' standing may suddenly develop into a violent form if neglected.

Symptoms .- Depression, dullness, and loss of appetite are the first indication of trouble. The dog lies about in dark corners, feigning sleep. He is reluctant about coming out for his food, of which he takes but little and perhaps none at all. The symptoms occur gradually in a mild case, but very rapidly when the condition has been caused by some violent irritant, such as poisoning by arsenic. Pain is always present, varying in degree with the severity of the attack. He may lie on his back, bite at his flank, and show distress from pressure over the abdomen, or he may lie flat on his side, breathe hard, and groan with every breath. The temperature when normal or slightly raised indicates that the condition is mild, while a fever of

103° F. means that the animal is in a serious condition. In the last stages, however, the temperature will be below normal. Vomiting is a prominent symptom and occurs early in the course of the disease. The frequency and ease with which vomiting occurs increase as the condition progresses. The bowels are at first constipated but later diarrhea ensues. The first loose stools are soft and pasty, but later they become thin and watery and may be colored with blood. Evidence of hemorrhage is to be taken seriously. Violent diarrhea extending over a period of forty-eight hours is apt to be fatal. As the disease continues the dog becomes very weak and finally collapses. Convulsions may occur as evidence of general systemic poisoning.

Prevention.—When the dog is given good nourishing food in proper quantities and at proper intervals, a great many of the causes of enteritis are eliminated. Foreign bodies are eaten generally as a result of a depraved appetite, due to a disorder of the stomach, but if the dog is cared for properly, this should not exist. If the dog is not given bones, nor allowed to play with a small ball, the danger of obstruction is slight. There is always a chance of accidental poisoning, but this does not happen as often as popularly supposed. Dogs are much more often poisoned by large doses of drastic worm remedies.

Treatment.-Mild attacks may be treated by cleaning out the intestinal tract with a dose of

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castor oil, fasting the dog for twenty-four hours, and if the symptoms abate, put him on meager rations for a week. This diet should be principally meat. If the dog exhibits fever, vomits persistently, or has a bad diarrhea, he should immediately be placed under the doctor's care.

Intoxication.—Intoxication is a poisoning of the system by the toxic by-products of digestion. These are usually eliminated in the feces, but when the bowels become sluggish or the process of digestion incomplete, the toxins accumulate in abnormal amounts and are absorbed into the system. This condition is very common and accounts for more deaths than any other form of poisoning.

Symptoms.—Nervous twitching varying from slight movements of a set of muscles to violent spasms of the whole body musculature. The dog usually lies on his side and goes through the movements of running. Frothing at the mouth is present in most cases. The convulsions usually occur without warning and last from one to fifteen minutes. The dog may have one convulsion in twenty-four hours or he may have them as often as every fifteen minutes, but he could not stand more than fifteen or twenty of them. After the convulsions the dog is very weak and will sleep for hours. Sometimes they go into a convulsion which lasts until death.

Treatment.-The doctor should be summoned immediately. Until he arrives the dog must be

kept as quiet as possible, and during the intervening time cold swabs may be placed on his head.

Vomiting .-- Vomiting is a symptom of a disordered stomach which may be either a disturbance of digestion or an inflammation of the mucous membranes. The stomach is subject to much abuse by frequent gorging with bulky, sloppy foods which are hard to digest. Coping with this day after day taxes the endurance of the organ and sooner or later it becomes exhausted. It is very fortunate for the dog that he can vomit so easily, for as soon as the stomach reaches its limit, it promptly rebels. When this occurs all food and liquids should be withheld for at least twenty-four hours, and longer if necessary. Too often this warning is unheeded and the indulgent owner persists in giving one food after another in hopes of finding something that the dog can retain. This only wears out an exhausted organ and increases the disturbance already existing.

The character of the vomit depends upon the nature of the trouble. When the stomach is merely overworked the vomit will consist of the offending food. A white froth indicates an inflammation. If the liver is involved a greenish or yellow vomit occurs.

Vomiting may occur only after eating, extending over a protracted period, or it may take place at very frequent intervals throughout the day. When the vomiting is persistent the dog soon collapses and death rapidly follows.

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Treatment.-All food and water must be withheld for a period of twenty-four hours. If the bowels are constipated, the dog should be given an enema of soap solution. After this, subnitrate of bismuth may be given in five grain doses with a teaspoonful of milk of magnesia every two hours. If this is retained it may be continued for from four to six doses, depending on the character of the bowels, and then the bismuth may be given without the magnesia. If the vomiting is checked the dog may be given a small portion of scrapped beef. at the end of the twenty-four hour fast, followed a little later with a tablespoonful of water. If these are retained, they may be repeated at frequent intervals, gradually increasing the portions until the dog is back on his normal diet. If vomiting persists the doctor should be consulted.

Diarrhea.—Diarrhea is a symptom indicating an inflammation of the intestines. It may be caused by improper feeding, spoiled food, poisons, irritating drugs, and intoxication. It may accompany disturbances of the liver, rickets, and distemper.

Symptoms.—The stools may be soft and pasty or thin and watery. They may be yellow, brown, black or red. In frequency they may vary from one every twenty-four hours to one every hour. As the disease progresses the stools grow thinner in consistency and more frequent.

Treatment.-With the first onset of diarrhea the animal should be given a purge to clean the intes-

tinal tract of the offending material. Castor oil, citrate of magnesia, or epsom salts may be used in liberal doses. Food and water should be stopped for twenty-four hours. After purging, the dog can be given bismuth subnitrate in five or ten grain doses, every one to four hours, depending on the severity of the attack. Food when given should consist of small quantities of meat, with perhaps a puppy or dog biscuit at frequent intervals. Water, if given, should be boiled and allowed only in very small quantities at a time, but frequently. It is better to use barley water, oatmeal gruel, or eggs with milk, hecause of their mucilaginous nature which helps to protect the mucous membranes.

Constipation.—We speak of the bowels as being costive when the stool becomes hard and dry. Impaction results from the retention of hard dry stools. If a hard mass of fecal matter, a bone, peach pit, or other foreign body becomes lodged in the intestines we speak of it as an obstruction. The term constipation covers all three conditions.

Cause.—Constipation results from the ingestion of large quantities of food, which are hard to digest, bones, foreign bodies, lack of exercise, and fevers. In old dogs, the digestive organs become weakened and the fecal mass is moved on very slowly.

Potatoes, rice, corn, and bread are hard to digest, and being bulky form a large mass which on accumulating paralyzes the bowels. Bones are a very frequent cause of constipation. When they

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are broken up by the digestive process, there is left a great residue of mineral salts which mix with the stool and form a hard dry mass. In many cases, the bones are not digested and small pieces become imbedded in the stool. The sharp points scratch the mucous membrane of the intestines and hinder the progress of the stool. This mass very frequently becomes impacted in the rectum so hard that it is necessary to use forceps to break it up in order that it may be removed. Bones of some size, such as chop bones, often become fast in the intestines and obstruct the passage of fecal matter. Other foreign bodies get lodged in the same way.

Through lack of exercise the muscles of the intestines become inactive and weakened like those in the body and legs. The fecal matter is not propelled along as rapidly as it should be, and a large mass accumulates which is hard to pass.

In fevers the increased body temperature causes absorption of the moisture from the stool, which becomes too dry to move freely.

Symptoms.—Observation should be made at each evacuation to determine the character of the movement. In this way alone can the condition of the bowels be kept in check and constipation avoided. After it has developed, the animal shows indications of dullness and depression, loss of appetite, foul breath, straining at frequent intervals without results, weakness of hind legs, followed by paralysis,

loss of control of all body muscles, collapse and convulsions.

Treatment .- With the passage of a stool too hard and dry, mineral oil, olive oil, or milk of magnesia should be administered in small repeated doses until the condition is relieved. At the same time the diet should receive a substantial decrease or be changed to overcome the cause. When no movement has occurred for twenty-four hours, oil should be administered, and in event of failure to function in the next twenty-four hours, a glycerin suppository should be inserted in the rectum or a soap enema given. At this time food should be withheld until a movement has been secured, but water may be allowed freely, unless vomiting occurs. In case of no movement for three days or development of fever, the condition has reached such a severe stage that a veterinarian should be consulted without delay.

Stomach Worms.—Round worms, varying in length from one to three inches and in numbers from one to twenty, white or pinkish white in color, infest the stomach of a large number of puppies. They live on the food intended for the animal, and when present in large numbers deprive him of a great deal of nourishment. Their presence as a foreign body irritates the stomach considerably. They thrive best in animals fed on milk, vegetables, and a sloppy diet. Although they are of unquestionable harm to the dog, they are not as danger-

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ous as is generally supposed. The dog that is well nourished can harbor worms without any noticeable results. However, their tendency to consume the dog's nourishment aids in the development of such a disease as rickets. In fact, when one condition is found the other is present also. There are many worm medicines on the market, the use of which is always attended with danger. Drugs of sufficient strength to dislodge the worms are drastic irritants to the stomach. Some dogs are more susceptible than others to these medicines, which if given in too large doses produce an enteritis that is often fatal. Frequently repeated treatments are apt to cause the development of a chronic gastroenteritis, which if not fatal, takes months to overcome. Treatments, unless wisely administered, are of more harm to the animal than the worms.

The presence of worms can be determined either by observing the passage of mature worms or by finding the eggs in the stool by microscopic examination. Under no consideration should a dog be given a treatment unless a diagnosis has been made in one of these ways.

Tapeworms.—The intestines are frequently inhabited by tapeworms. These worms grow from a parent head segment with great rapidity until the worm reaches the length of three or four feet and even longer. There are various types of tapeworm. In some the segments are broad and short and remain intact, in others the segments are long

and narrow. These are passed, separated and alone, or in bunches. They possess the power of movement and when they elongate themselves have the appearance of a roundworm. They are frequently spoken of as seat worms because they often stick to the hair about the rectum.

The same rules of treatment apply to these worms as to the roundworms.

Infected Anal Glands.—It is generally thought that a dog is showing evidence of worms when he draws himself along on the floor, sliding on his rectum. This symptom, however, is due to an impaction or infection of the anal glands. These glands are situated about the anus and secrete an oily fluid which lubricates the anus and aids defecation. At times this secretion becomes thickened and is retained in the gland. As its pressure becomes increased necrosis takes place and an abscess is formed, resulting in a very irritating and painful condition. Because of the pain experienced in defecation, the stool is retained as long as possible and constipation results.

Treatment.—Hot moist packs applied over the anus help to relieve the pain. Following this the parts should be massaged with olive oil or vaseline. After several applications, gentle massage about the anus will break down the obstruction at the opening of the gland and the secretion can be pressed out. When an abscess forms this must be lanced and treated accordingly.

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DISEASES OF THE RESPIRATORY ORGANS

Catarrh of the Nose (Cold in the Head).—This condition is brought about by chilling through exposure in cold rainy weather, after a bath, clipping or some other condition, which lowers the resistance of the body. It may be caused by the inhaling of irritating substances, such as dust, smoke, or fumes. It is frequently a symptom of distemper.

Symptoms.—Sneezing accompanied by a watery nasal discharge which may take the form of a grayish mucus and later a yellow excretion. When accompanied by fever, distemper may be suspected.

Treatment.—Rhinitis tablets, one every three or four hours. Boric acid solution may be dropped in the nostrils.

Laryngitis (Sore Throat).—Inflammation of the larynx results from exposure to cold or the inhalation of irritating substances, and may be accompanied by a catarrh of the nose. It is also caused by excessive barking or by pulling at the collar. Since the dog begins to cough directly after eating, the owner is led to believe that the animal has got a bone or some foreign body in his throat.

Symptoms.—Cough and tenderness of the throat are the principal symptoms. In later stages, as the mucous secretions of the larynx form, they are coughed up. The difficulty in raising this mucus or phlegm, as it is usually called, often induces the animal to vomit. The cough is persistent and oc-

curs more frequently at night. It is induced by pressure of the throat which is tender. In severe cases, the breathing is labored and fever is present.

Treatment.—The food should be warm, moistened, and in very small pieces to facilitate easy swallowing. If the bowels are costive, oil should be given. The cough can be treated with Syrup of White Pine, given in teaspoonful doses every three or four hours. The disease should not be allowed to progress for any length of time. If the home treatment fails to give relief, the doctor should be summoned.

Bronchitis.—Bronchitis develops from the same causes as laryngitis and is also a symptom of distemper.

Symptoms.—High fever and chills, attending depression and fatigue, loss of appetite, heavy breathing, hard dry cough, and nasal discharge.

Pneumonia.—Pneumonia is brought on by sudden chilling or long exposure to cold drafts. It may be caused by inhaling oil, should the animal choke during its administration. Pneumonia sometimes occurs as an infectious disease and is often a complication of distemper.

Symptoms.—The symptoms of pneumonia resemble those of bronchitis from which it is hard to differentiate.

Treatment.—Bronchitis and pneumonia both should be placed under the care of the doctor. The high fever is sufficient evidence of the seriousness

of the condition. Nursing is an important factor in the successful recovery of these diseases. The dog should be kept in a good warm place which can be aired frequently without causing a draft to strike the animal. The appetite must be coaxed since it is important to keep up the animal's strength. Tempting dishes should be prepared and frequent attempts made to induce the animal to eat. The bowels must be kept open and when the dog is very weak it is necessary to aid him in cleaning himself. Should he become soiled the parts may be sponged with hot water, after which he must be thoroughly dried.

Bronchial Asthma.—This disease is seen in old, fat dogs. It usually results from a neglected case of bronchitis. The breathing becomes short, labored, and wheezing. It is more difficult after running, barking or excitement. This leads to an attack of coughing which ends with choking and even vomiting. When the mucus in the throat has been raised and spit out, the attack passes off. The heart is weakened and bowels are usually costive.

Treatment.—The constipation should be relieved by the regular use of small doses of mineral oil. The dog's diet should be restricted to very small portions of meat in an attempt to overcome the obesity. Excitement should be avoided as much as possible. The heart should be stimulated and antispasmodics given under the direction of the veterinarian.

INFECTIOUS DISEASES

Distemper.-This is the most dreaded of all diseases affecting dogs. It is an influenza-like ailment of unknown cause. It is highly contagious and occurs in dogs of all ages, but is more frequent in young animals. Distemper is easily disseminated and actual contact with sick animals is not necessary for infection. The virus is spread freely wherever dogs are collected in large numbers. Dog shows and kennels are very common mediums for spreading the disease. However, the infection can be gathered in the street or carried on the clothing. Unsanitary quarters are favorite breeding grounds for infection, and the vitality of dogs kept under such conditions is so lowered that they become easy victims to the disease. Distemper occurs more often in young animals, because their powers of resistance are not sufficient to combat the infection. Puppies hampered by improper feeding, worms, or rickets possess much less vitality than healthy ones.

Symptoms.—Discharge from the eyes and nose, sneezing, coughing, high fever, loss of appetite, and diarrhea are the general symptoms. The dog may have a heavy bronchitis or a pneumonia. The disease may be confined to the digestive tract. Pus blisters are often found on the belly and groin. Involvement of the nervous system is often evidenced by twitching of a group of muscles or by

convulsions. In the later stages chorea may develop, although this disease usually occurs some time after the other symptoms have disappeared, and the distemper has been announced cured. Distemper may occur in the form of a diarrhea which lasts from two to four days. This is usually followed in about four weeks with chorea. In some cases no other symptom than convulsions is present. The cases which exhibit a bronchitis with a heavy nasal discharge are not as fatal as those which involve the intestines. The death rate is very high.

Prevention.—Every possible precaution should be exercised in preventing distemper. When the dog is out for his walk he should be kept away from suspicious looking animals, especially the street variety. Great care should be taken that he does not contract a cold on rainy days, or after his bath. If the dog is not as vigorous as he should be, find out the reason and try to overcome it. Should the owner desire to enter his dog in a show, it is advisable to have him vaccinated before doing so. The immunity thus conferred will last but a few weeks and should be done about a week before showing.

Treatment.—There is no known cure for distemper. Serums in the hands of those familiar with their action often prove helpful if used early in the disease. The dog should immediately be put under the doctor's care. Delays are dangerous, and with

distemper, twenty-four hours on the start means a great deal in the final outcome.

Chorea.-Chorea is a nervous disease which develops as a sequel of distemper. It may appear during the later course of the disease, but is not usually seen sooner than two weeks after recovery, and may not develop for two months afterward. The disease is thought to be due to a degeneration of the nerve tissue just outside of the spinal cord, caused by toxins generated by the distemper virus. It is characterized by regular spasms of certain muscles or groups of muscles. Usually one leg, the jaw, or the muscle's over the head are affected. Sometimes all of the legs may be involved. The condition always starts in one group of muscles and if the progress is slow, further development may be checked. The dog may live a very normal life thereafter in spite of this handicap. When the disease develops rapidly, other parts of the body soon become affected. The convulsive twitching of a large part of the body muscles consumes a great amount of energy and the dog soon becomes exhausted. In these cases treatment is without results and the animal must be destroyed or it will die a hard and lingering death.

Treatment.—Many and various drugs have been used in the treatment of chorea. Each veterinarian will have a different line of treatment based on the results of his experience.

DISEASES OF THE URINARY TRACT

Urinary disorders are not common in dogs and their diagnosis and treatment are difficult. It is important, however, that the dog has daily passages of his urine and it is the owner's duty at all times to keep this in mind. Retention of the urine is very dangerous, for it quickly leads to uremic poisoning, which is fatal. If no water is passed for more than twenty-four hours the matter should be given immediate attention. The chief causes of retention are paralysis of the bladder and the presence of calculi, or stones in the urethra. Paralysis of the bladder may be caused by direct injuries to the region or to the spine. It comes secondary to constipation and very often in pregnant bitches during whelping. Stones or calculi are formed in the bladder and carried down into the urethra where they become impacted, obstructing the passage of urine. Retention of urine may be recognized by frequent attempts at urination without results, or by the passage of but a few drops.

Urine discolored by blood is symptomatic of an inflammation of the bladder, caused generally by calculi. When the inflammation is intense or the kidneys are involved, the urine becomes cloudy and, sometimes, coffee-colored. These conditions are both dangerous and need prompt attention.

GENERAL DISEASES

Rickets.—Rickets is a very important and extremely common disease affecting puppies. It is generally considered as a disease of the bones, but as a matter of fact, the nutrition of the whole body is affected. When the puppy is born, the bones are soft, and as he grows, they should normally become hardened by the lime salts which are deposited in them. In rickets this process does not take place as rapidly as it should, if at all. The muscles are weak and flabby, but may be padded with fat. Digestion does not properly function and the general condition of the animal is affected.

The cause of rickets may be either a lack of salts in the food or an excessive excretion of them. The disease may be inherited from its parents, or it may be a result of poor breeding, or of inbreeding. As yet the real cause has not been determined, but in nearly all cases the food has consisted mainly of milk, bread, vegetables, and soup. Since dogs affected with rickets almost invariably harbor worms there may be some connection between the two conditions. Collies, Shepherd Dogs, Airedales, English Bulldogs, and Pekingese are the breeds most commonly affected.

Symptoms.—The disease does not become noticeable until the pup is at least four weeks old, when it may be observed that he is not able to support his body on his legs. As a rule he is very fat and

this is supposed to be the cause of the trouble. The dog is more frequently from two to three months old before the symptoms of the disease appear. In these cases the dog becomes unthrifty, less lively, disinclined to moving about, which he does with difficulty. There is great distention of the abdomen and the first evidence of trouble may be an attack of indigestion. The hair is dull and staring, the skin dry and scaly, and eczema may be present, or developing. The prominent signs of the disease are in the bones. The legs are crooked and the joints enlarged. The spine may be curved and the ribs so soft that the chest may be flattened similar to the human chest. In severe cases the dog shows marked evidence of pain when trying to move about or when being handled. As the disease progresses, the attacks of indigestion are increased in frequency. an intoxication of the system develops, and the dog is finally thrown into convulsions.

Prevention.—Rickets can be overcome to a great extent if the puppies are fed good nutritious food from the time they are weaned. The young puppies must receive a liberal quantity of meat as early as possible. Starchy foods and milk must be to a great extent eliminated. If worms are present they should be treated. The bitch when carrying her litter should be given plenty of solid food. Lime in the form of bone meal may be given. An abundance of exercise and fresh air should be allowed the

bitch while pregnant and the puppies as soon as they are able to be out.

Treatment.—If a case of rickets is recognized early enough in its course the progress can be checked and the condition overcome by rectifying the diet. The food should not only contain plenty of protein but should also have a considerable quantity of fat. Beef fat, butter, cream, eggs, olive oil, or cod-liver oil will supply this, but they must be used with discretion or the puppy's stomach which is already weakened will become upset. Lime salts may be artificially supplied by giving lime water in teaspoonful doses in the drinking water or by putting small quantities of bone meal in the food.

It should be determined early whether or not the puppy is harboring worms. In case they are present he should be treated for them providing he is strong enough to withstand the ordeal. When the disease has progressed to such a stage that the dog's movements are hampered the possibilities of a successful treatment are slight.

DISEASES OF THE SKIN

Eczema.—Eczema is a disease of the skin caused by a general systemic disturbance assisted by external irritation. It occurs in dogs of all ages but is more prevalent in puppies under six months and in dogs over six years of age. It most frequently affects old, fat dogs which receive but little exercise.

Causes .- The general disturbance which leads to eczema has been popularly termed "overheating of the blood." Certain substances, probably of the nature of toxins, arising from the digestive tract, circulate in the blood stream. These poisonous products irritate the skin, but it is not usually disturbed unless aggravated from the outside. If, however, they are produced in sufficient quantities. eczema may develop without the external irritation. The digestive disorder, which leads to this, may be caused by an irrational diet, an excess of food, and constipation, or it may coexist with worms, rickets, and distemper. The foods which are conducive to eczema are fats, milk, soups, gravies, and boiled liver. Raw meat absolutely does not cause this condition when fed in reasonable amounts, but eczema may develop when any of the proper foods are given in unlimited quantities. Constipation promotes any form of intoxication. Rickets and worms when brought to notice are usually associated with an error in diet. During such severe debilitating diseases as distemper the resistance of the body is too low to combat either external or internal irritation of the skin.

The external irritation may be produced by dirt, fleas, lice, matted hair, frequent bathing, strong soaps and disinfectants. However, unless the systemic condition above described exists, the skin will not be affected by the irritation. A dog in normal health may harbor fleas or lice without

any apparent harm. He may bite and scratch at his skin to rid himself of them, causing only superficial wounds which readily heal.

Symptoms .- Eczema may develop at any time during the year, but is much more prevalent during the late summer, that is from the first of July until the last of October. The disease usually starts with scratching and biting at the skin. The small areas first affected spread into large patches and may even extend over the whole body surface. The favorite location of the primary lesions are the neck, back of the ears, the chest at the armpits, the belly, and the back just ahead of the tail. As the scratching continues the skin becomes red, abrasions are caused by the nails or teeth and the hair falls out over the patches. In some cases a moist viscid discharge exudes from the surface, while in others scales and scabs are found. Small pimples may appear in the affected areas or scattered over the entire body. As the disease progresses, the skin becomes thickened and thrown into folds. A distinct odor always escapes from a dog suffering from eczema. In the earlier stages the affected parts are very tender and painful to touch.

Prevention.—Careful feeding on small quantities of concentrated foods, together with plenty of outdoor exercise will prevent most cases of eczema. After the dog has once suffered from it, care should be taken afterwards, especially during the summer, to prevent its reoccurrence. Constipation

and any other systemic condition should be quickly corrected.

Treatment.—The first and most important part of the treatment consists in putting the animal on a diet. The amount of food given should be reduced to one-half or even one-quarter of the usual quantity. Raw beef is the best food to use in this condition, but it may also be boiled or roasted. In addition a small piece of dog cracker or dry hard bread may be given. For those who will not eat the crackers this diet is far more effectual, and in due course of time when the system needs more nourishment, the animal will partake of the hated cracker. This will serve as an indication that more food is needed, and if the animal has commenced to get thin it may be given.

Sulphur is used both internally and externally for eczema. The old habit of putting a lump of sulphur in the drinking water is of no value, but if it is given in the food, benefit may be derived from its use. Tablets make the most convenient form for administration, and those containing five grains can be given in doses of one or two, twice a day. For external applications, powdered sulphur can be mixed with lard or cottonseed oil in the proportions of one to eight. If no results are secured in a short time the doctor should be consulted, because once the condition becomes chronic and of long standing, it is very hard to overcome.

Mange.-Mange is a very severe disease of the

skin caused by a parasite which is so small that it can be seen only with the aid of the microscope. There are two distinct kinds of mange caused by separate parasites, each of which has a different method of attacking the skin. One burrows through the superficial layers, while the other follows the hairs down to their roots. The latter is naturally the more severe. Mange affects dogs of all ages, and all breeds. It is contagious and may be spread from one dog to another, not only by actual contact, but through the medium of anything used by the diseased animal. Thus the infection may be harbored in the collar, leader, blanket, combs, brushes, bed, and even in the cage, room, or yard where the diseased dog has been kept.

Symptoms.—The lesions so closely resemble eczema that except in severe cases it is almost impossible to distinguish between them without the use of the microscope. In severe forms of mange pustules appear which as they break, discharge pus that is filled with living parasites. Where pustules form in large numbers in one area, the skin may become pitted with holes. From this great quantities of bloody pus are discharged. Although the disease is a local affection, the general health of the animal may become affected when the condition is severe.

Treatment.—Very vigorous methods are necessary to combat mange. If the dog is of the longhaired variety, the coat must be entirely removed.

Lotions that are used must be thoroughly applied at regular intervals, to all parts of the body, otherwise the parasite may thrive on the untreated area. Strong active remedies must be used to destroy the organism, but they must not be too irritating to the skin, or it will be left in a deplorable condition. The lotions must not be applied too liberally.

Fleas and Lice.—The flea is the most annoying pest with which the dog is troubled. It is most prevalent during the late summer and autumn. Fleas breed in dark dirty places such as in carpets, cracks, corners, heaps of waste, etc. They lay eggs from which young are subsequently hatched. Fleas are found on all parts of the body, but more numerously where the hair is dense. On badly infected dogs, great nests of fleas are found, containing large quantities of black excretion in which are the eggs.

Coarse dogs are not so badly affected by fleas as are the finer breeds. If the dog is healthy no trouble may arise from them, except the annoyance of the continual scratching. However, when the skin is sensitive, eczema may result. The skin becomes reddened by the scratching, and wounds are inflicted by the nails and teeth. The lesions may spread out till the whole body is involved.

Treatment.—To kill fleas is a comparatively easy task, but to keep the dog free of them is a different proposition. The most simple remedy is Persian Insect Powder, which may be sifted into the hair at intervals of from four days to a week. The powder

is applied freely, working it through the hair to the skin. After an interval of half an hour the dog should be thoroughly brushed and combed to remove the stupefied fleas and the excess powder. This should be done over a sheet or newspaper in order to collect the fleas as they drop off so that they may be destroyed by burning the paper or boiling the sheet.

C/N, Pearson's Creolin or Lysol may be used in the bath water, or a tablespoonful of the disinfectant may be added to a quart of water and the solution used to saturate the hair just prior to the bath. An emulsion made by adding a tablespoonful of kerosene to a pint of milk or thick soapy water may be used in a like manner. Treatments will have to be repeated often to be successful.

Lice are not as common as fleas, but are much harder to combat. It is wise to clip the dog completely before beginning the treatment. The kerosene emulsions can be used to the best advantage. The proportion of kerosene should be increased at subsequent applications, providing the skin does not become sore from its use.

INJURIES

Wounds.—Superficial skin wounds are usually treated with daily applications of tincture of iodine. When they are very dirty and badly infected they must first be washed with a warm antiseptic solution

such as boric acid. If the wound is extensive it is often advisable to put in a few stitches. Deep ragged wounds must be thoroughly washed and then covered with swabs saturated with boric acid or some suitable antiseptic. Penetrating wounds caused by bites or nail puncture are the most dangerous. The skin opening being small, closes quickly, and the infection which has been carried into the deeper tissues causes an inflammation. Since the discharges cannot go to the surface they are forced out through the softer tissues, and blood poisoning results. Bite wounds require careful attention because of the danger of rabies.

Bruises.—The skin and muscles are bruised by blows, kicks and the like. The affected parts become, red, hot, swollen, and painful, owing to the inflammatory processes. During the first twentyfour hours after the wound has been inflicted, swabs soaked in cold water can be applied. Afterward hot applications are used, which may be followed by liniments and massage.

Abscesses.—Abscesses result from the destruction of tissues by blows and similar injuries and from puncture wounds. The inflammation instead of spreading remains confined to a small area, and pus develops. This gives rise to a hot, painful swelling which is more or less circumscribed. When this is "ripe" it must be opened, the pus drawn out, and the wound treated with antiseptics. Hot moist

packs or poultices will hasten the development of the abscess.

Dislocations.—In the dog the shoulder and elbow joints of the front leg and the stifle and hip joints of the hind leg are most subject to dislocation. This is brought about by a fall, jumping, slipping, or from a blow. Unless the dislocation is reduced within a comparatively short time, the tissues become so swollen and the ligaments so tense that it is practically impossible to reset the leg without causing injury to the tissues. To prevent swelling before the doctor arrives, the parts should be covered with swabs on which cold water is frequently poured.

Fractures .- Although fractures may occur in any bone in the body, they are most frequently seen in the leg. Broken bones result from falls, blows, and automobile accidents. Strange as it may seen, they result more frequently from short falls, such as from a chair, than from a second or third story window. The bones of the pelvis are frequently crushed when the dog is run down by an automobile. With such an accident there is always danger of a rupture of a blood vessel with an internal hemorrhage. Fractures are recognized by the great pain resulting from movement of the parts, limpness, and inability to stand. Sometimes a noise can be heard or felt, due to the scraping of the broken ends of the bone. A temporary bandage is first loosely applied to remain until the swelling sub-

sides. This may be soaked with cold water to discourage swelling. After forty-eight to seventy-two hours a permanent cast should be applied by a competent hand. Bandages that are applied too tightly, with too little cotton padding, or not covering the whole of the leg beyond the break in the direction of the toe, will cause necrosis or sloughing of the tissue on account of a stoppage of the circulation of blood to the parts. Bandages put on by inexperienced persons should be changed at least every third day. During the process of healing the dog should be kept as quiet as possible to avoid any movement or displacement of the broken bones.

CHAPTER IV

CARE AND DISEASES OF BREEDING ANIMALS

BREEDING

Advisability .- The house pet should under no circumstances be bred because of the great risks involved. The bearing of young is a normal function which should not be attended with danger provided the dog is kept under natural conditions and allowed to choose its own mate. The house dog, however, lives a very abnormal life and is forced to mate with the dog which meets the approval of her master. Since pet dogs are usually products of systematic breeding aimed at the development of an ideal type, their powers of reproduction, as in all other high bred animals, are greatly reduced. This weakness is due mainly to lack of freedom, overfeeding, and close breeding. The difficulties commonly encountered are, inability to deliver their puppies, death of the puppies prior to the time of delivery, inflammation of the womb, and eclampsia. Each of these conditions causes a great deal of suffering and is frequently fatal.

Professional breeders expect a certain amount of trouble with their bitches and since they are kept only as a business proposition the loss is entirely monetary. This, on the other hand, is not the case

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with the pet. She occupies a prominent position in the family and receives the love and devotion of all of its members. Her loss cannot be measured by money, for the grief of all those who love her is beyond money value. He who sponsored the breeding is responsible for her untimely death.

The dog, no matter whether it be male or female, is much less desirable as a house dog after breeding. The bitch loses her graceful form and becomes more excitable during her period of season. The dog develops a great desire to mingle with other dogs, especially those of the opposite sex. He may become restless and will even run away from his home, if the opportunity is afforded, in order to gratify his desire. When unable to do this he often becomes obnoxious about the house.

Necessity.—Under normal conditions the bearing of young should improve the health of the matron. The advantages, however, do not outweigh the dangers, hence the performance is not to be advised even though it may seemingly be recommended. Breeding is by no means necessary to the maintenance of health, for it is possible for dogs of either sex to pass through a very vigorous existence without having a single intercourse.

REPRODUCTIVE FUNCTIONS

Estrum.—The period of estrum or season, as it is generally called, first occurs in the bitch when

she is about one year old, but it may appear at any time from the ninth to the eighteenth month. It should recur, thereafter, at intervals of six months. An irregularity of the interval between seasons sometimes occurs, but the period is always constant for the individual concerned. Some dogs come in season but once a year, others are sick at regular intervals of four months, and others at three.

Estrum is first recognized by a swelling of the vagina or external genital. In a few days a mucous discharge appears, the amount of which depends on the sexual vigor of the animal. This period lasts from seven to ten days. The dog is very playful and desires the company of other dogs, especially of the opposite sex, but she will not permit intercourse. During the second stage of season the discharge becomes bloody and more copious. This period lasts about seven days, during which time mating may take place successfully. When the bleeding stops, the swelling of the vagina disappears. The entire period of seascn covers from sixteen to twenty days.

Care of the Dog During Estrum.—When breeding is not desired the bitch should be kept away from all other animals since their presence causes undue excitement. Being naturally prolific breeders they usually try to seek a mate. When a male and female are kept in the home together they should be separated at this time and every precaution taken

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to avoid their getting together. Oftentimes through carelessness doors are left open and instantly the animals seek each other. During her period of season the bitch should be fed more lightly than usual and the bowels should receive added attention. Under no circumstances should she be bathed while in this condition.

Mating .- When breeding is contemplated, the male should be selected with great care. This is particularly important in the small toys and in Boston Terriers. Consideration should be given, not only to the individual but also to his ancestors. The size is of greatest importance. A small dog may be the offspring of much larger parents, in which case his get would in all probability be of the larger type. The next consideration is the weak points of the bitch, for if possible a male should be selected whose characteristics are strong where hers are weak. The correct time for mating is usually considered as the tenth day of season ; some breeders prefer to have two services, one on the tenth and the other on the thirteenth day. This, however, should be decided by the owner of the sire. The mating should be superintended by some one who has had experience in the procedure. If the bitch is afraid of the dog or acts the least bit combative, the intercourse should not be forced, for the unwillingness of the bitch usually is significant of an unsuitable union. The date of each service should be recorded and the day of expected parturition determined.

This is very important, because should difficulty arise it is hard to decide just what course to take unless the time of confinement is definitely known. For instance, if the dog refused food and the passage was found open there would be no cause for alarm if it occurred on the sixty-second day, but if it was the sixty-sixth day, the puppies would have to be delivered immediately by one means or another.

False Conception.—This is a peculiar phenomenon of nature. At about six weeks after the period of season the breasts enlarge and milk is formed. This occurs in bitches that have not been mated more frequently than in those that have. The pressure of the milk causes great pain. The temperature goes up, the animal loses appetite and the bowels become costive. Treatment consists in applying hot towels to the breasts, after which camphorated oil is carefully massaged over them. A dose of castor oil is administered and food and water are given sparingly for a few days. Abscesses of the breast occasionally result from this condition.

Pregnancy.—During the period that the bitch carries her young the bowels should be kept free. She should have a liberal diet of good nourishing food unless she is very fat. The food should, however, not be too bulky or sloppy. As much exercise as possible should be given, especially if she is obese. Great care should be taken to prevent accidents. The dog must be kept clean, but not bathed

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more than is actually necessary. Toward the last she should not be given a tub bath, but can be cleaned by sponging and brushing.

Signs of Pregnancy.—The pregnant bitch is very deceiving. Frequently she will go until within two or three days of her time without showing the least enlargement of the abdomen or filling of the breasts. However, there should be a steady increase in the distention of the abdomen from the fourth or fifth week on. The breasts should enlarge and milk appear by the seventh or eighth week. The appetite should be increased, the disposition become more gentle and loving, and toward the last movement of the puppies should be felt.

False Pregnancy.—Occasionally bitches which have been served will show marked distention of the abdomen and filling of the breasts up to the sixth week. The owner will by this time be speculating on what he is going to do with the enormous litter of puppies, when suddenly the abdomen collapses and the puppies become a dream. Sometimes a bitch will show no sign of having conceived until the day on which she should whelp, when she begins to make her nest by tearing up her bed, then lying down and beginning to labor. She may keep this up for an hour or so when she suddenly forgets or the desire disappears.

Parturition or Delivery.—Delivery of the puppies should occur on the sixty-third day after mating. The time, however, may normally vary from fifty-

eight to sixty-six days in individual bitches, but the period is usually constant in succeeding pregnancies. The first sign of the approach of whelping is a swelling of the vagina, which may appear from twentyfour to forty-eight hours before the actual delivery. Ordinarily the dog will go through the act of making a nest by tearing up her bedding, a paper, or whatever else she may find that is suitable. Her ordinary sleeping place is a convenient spot for fler to have her puppies providing she has sufficient pads or cloths for her bed. Soon after the nest is made the labor pains commence. These somewhat resemble the straining that would occur if the dog were attempting to pass a very constipated stool. To deliver the puppies she usually lies on her chest with her body slightly curved in the usual manner, but when the pains become violent she may lie flat on her side. She frequently gets up, walks around, and lies down in a fresh place.

As the vagina enlarges the water sack appears. Labor pains keep forcing this backwards and as it reaches the outer edge of the vagina it bursts and the puppy may be seen presented just back of it. The most common presentation is head first and back upwards, although the puppy may come hind feet first. The latter position, however, is more difficult to deliver and unless accomplished quickly the puppy may smother. When the puppy is upside down or the head is turned to one side, delivery is difficult and in most cases is not possible without

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aid. The actual process of delivery takes place very quickly and is accomplished by one or two vigorous contractions of the uterus. The afterbirth usually comes out with the puppy, and the mother, after severing the cord, eats the sack. She then proceeds to clean the puppy by licking and rolling it around on the bedding. After it is dry she cuddles down with it up near a breast. If the puppy is healthy he will immediately begin to look for the nipple. Only a short interval should elapse between succeeding births and a litter of four or five should be born in from one to five hours.

Difficult Parturition .- When there is a deformity of the pelvic cavity of the bitch or the puppies are too large to pass through it, trouble ensues. Labor becomes more difficult if the puppies are dry, dead or decayed. If the uterus is infected the labor pains are much weaker. Should an interval of two hours pass after the beginning of labor without results, it may be assumed that the bitch is in trouble. In such cases help should be summoned immediately. If the bitch is able to force the puppies but part way out an attendant may remove it, providing he does not have to exert great force. Occasionally one puppy is delivered without trouble, but the bitch does not seem able to bring forth the second. This may be due to a dryness of the canal or if the puppy has been dead for some time and the sack broken the hair may be dry and sticky. To overcome this, olive oil may be carried into the vagina

using the forefinger to smear the oil around the cavity and over the pup. If this does not produce results in a short time the bitch will require surgical aid. Under no circumstances should the bitch be allowed more than twelve hours for delivering her puppies. It is much safer to summon the doctor at the end of six hours.

In case the bitch does not show signs of whelping on the sixty-third day, there is no cause for worry providing she is eating regularly, shows no distress and has no discharge from the vagina. As the sixty cixth day passes, if there is still no disturbance in her condition and no evidence of an opening of the womb, it can safely be decided that the bitch is not in whelp. On the other hand, if the appetite fails, the bitch becomes restless, languid and feverish, any time after the fifty-eighth day she, in all probability, has an infection of the uterus or is carrying dead puppies which she will not be able to deliver without assistance. When the bitch is neglected until the womb becomes inflamed, hope of recovery is scant. But if she is taken care of early, before she becomes exhausted or infected, she may safely go through even a Cæsarian section operation, should this prove necessary. Under no circumstances should the vagina or uterus be explored or instruments used by anyone not familiar with the organs.

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CARE

Care after Whelping .--- If the bitch has eaten the afterbirth of her puppies she should be given a dose of castor oil a short time after the last delivery. She will require no food for several hours but should be allowed to remain quietly with her puppies. After she is rested, warm egg and milk, gruel or broth may be offered her. Later if she feels inclined she may have some meat and on the second day can be given her regular diet. If her milk seems scant she may be given oatmeal, gruels and milk regularly, but care must be taken that an upset of the digestion does not occur. When there is not enough milk for the puppies a foster mother should be obtained, otherwise it will be necessary to bring them up on a bottle, a very difficult undertaking. Occasionally when the bitch has had a particularly hard time whelping, she will refuse to own her young. They must be kept warm and fed either from a bottle or by holding the bitch so that they can nurse her. In a few days, as soon as her condition improves, she will most likely take to them again.

Following parturition there is generally a slight discharge from the uterus which lasts for several days. This, however, must not be confused with the discharge which accompanies inflammation of the womb. This condition usually becomes evident on the second or third day after whelping. The

discharge is copious, brownish in color and viscid in character, and very fetid. The dog carries a high fever, refuses food and shows extreme exhaustion. Since douching under such conditions might cause a rupture of the uterus it should be done only on the advice of a veterinarian.

Care of the Breasts.—After a normal whelping of at least four puppies the breasts should need no attention. When only one or two of the puppies are saved the bitch may have a superabundant quantity of milk. When this occurs the breast becomes swollen, hard and painful and the bitch may develop a fever and refuse food. Sufficient milk should be removed to relieve the tension. This may be done by carefully grasping the nipple between the thumb and forefinger far up on the breast and massaging downwards toward the opening. When the breasts are very painful hot towels may be applied, followed by an application of camphorated oil.

Eclampsia.—Eclampsia is a nervous disease affecting suckling bitches. It occurs usually during the third week after birth of the puppies but may occur before or later than that time. It is more frequent in bitches feeding large litters that are very fat. It appears suddenly and lasts from twenty-four to forty-eight hours. Given proper care the dog will almost invariably recover, but when neglected the disease is fatal.

Symptoms .- The condition appears as an intoxi-

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cation or systemic poisoning. The dog suddenly becomes restless and breathes rapidly. In from fifteen minutes to an hour the animal loses control of her legs and is unable to move. The legs and head are extended and rigid except for a violent twitching of the muscles. The breathing becomes very difficult and can be heard at some distance.

Treatment.—The dog should be rushed to the doctor with all possible haste. In case this is impossible she may be given 10 to 15 grains of sodium bromide in tablet form. This may help the condition but is rarely sufficient to counteract the violent convulsions. Enemas may be given and hot towels wrapped about the body. Liquids of any nature absolutely must not be given by the mouth since the dog is unable to swallow and they would be carried down into the lungs.

CHAPTER V

FOODS AND FEEDING

FOOD REQUIREMENTS

Although feeding the dog is a very simple problem, a great deal of his sickness may be traced either directly or indirectly to his food. These dietetic disorders are usually due to the elimination of meat in favor of the vegetable foods. Mainly responsible for this is the prevalent notion that meat is harmful to the dog. This assumption is, however, not based on facts, but, as will be shown, is directly contrary to them. Those who accept this idea think that meat will make the dog wild and vicious or drive him mad. When meat is used extensively the condition of the dog is exceptionally good and he is very active and playful. Sometimes in his play he gets rather rough and may even unmeaningly bite. This is the nearest to being mad or vicious that the dog approaches from eating meat. So far as rabies, hydrophobia, or mad dog is concerned, this is a specific disease caused by the bite of a dog already affected. It is also believed that worms are caused by meat. Under certain conditions this is barely possible, but the same chance exists for man and still we do not refrain from eating it. One of the many tapeworms affecting

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the dog occurs in its cystic stage in the muscles of beef, but under the universal meat inspection which we now enjoy the dangers from this are *nil*, since it is one of the conditions for which the meat is examined. Meat is frequently accused of being the cause of eczema, but under the discussion of the disease it has been shown that it is due instead to starchy foods.

That meat is the natural diet of the dog can readily be proven by a study of his natural characteristics, the comparative anatomy of his digestive tract, and the difference in the composition of foods. All animals are divided into three classes: (1) Herbivora, such as the horse, cow, sheep, camel, and elephant, feed entirely on vegetable foods; (2) Omnivora, including man and the hog, eat both animal and vegetable foods; (3) Carnivora, to which class belongs the dog, cat, lion, and tiger, are supposed to live exclusively on flesh. Examining the digestive tracts of these groups, we find that the horse and cow are supplied with a very long and voluminous intestine making accommodation for large quantities of food material. On the other hand, the dog has a comparatively short and small intestine, affording room for only limited amounts. From this it is easy to determine that the food of the dog must be supplied in concentrated form. Analyses of foods show that meats contain a high percentage of protein which is essential to body activity, a considerable quantity of fat, but no car-

bohydrates or starches. Vegetable foods contain a large amount of water, fiber and starches, with only a small quantity of protein. Thus, to acquire the amount of protein necessary, the dog must consume a large volume of vegetable foods, while the same nourishment could be obtained from a small quantity of meat. Furthermore, the knowledge gained from the feeding of dogs, both experimentally and in the treatment of disease, has shown that the more concentrated the food the easier it is digested.

FOODS

Meats-Beef.-Of all meats beef is most extensively used since it is served more frequently in the ordinary household. It may be given raw and in this form is most easily digested and of greater food value, because none of its nutritiveness is lost in the preparation. The meat should be ground preferably at home, for that which the butcher prepares contains too much fat and gristle. Raw beef should not be made the exclusive diet, except in certain conditions, for, although it supplies all of the energy needed by the body, it lacks the fats and sugars necessary to keep the animal robust. For this reason, it may be given alone and in small quantities to reduce fat animals. The raw meat is so thoroughly digested that but little waste material is left, and thus the stool is scanty. This lack of bulk sometimes induces constipation. Occasionally

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in young dogs, not used to meats, diarrhea may result from intensive feeding of raw beef alone.

For general use boiled beef is better than raw. It may be fed in larger quantities without affecting the bowels. It may be prepared by boiling either slowly for hours until tender or quickly until the color changes. By the latter method less of the substance is lost. After cooking it should be shredded or ground. Portions from the ordinary stew may be economically used. When roast beef or broiled steak are served on the family table the less desirable parts and the trimmings may be ground up for the dog. Any cut of beef may be used providing it is lean and free from gristle. When buying exclusively for the dog the round is the most economical.

Horse Meat.—For feeding large numbers of dogs this meat can often be purchased at a much lower price than beef. It has been found to be equally as good. No different effects are noticed from its use except that it is apt slightly to loosen the bowels. It is safer to boil the horse meat since it is rarely inspected.

Veal.—Veal possesses no advantage over beef, but when it is used by the family it can be given with advantage to the dog with the result of making a greater variety in the diet. It can be given raw but is better when stewed or boiled.

Lamb.—Stewed, roast, or broiled lamb or mutton may occasionally be used, and when the appetite is

poor often proves very tempting. The tag ends of chops are usually left from the table, and if ground, are readily taken by the dog.

Liver.—Raw liver may be used occasionally, but not as a steady diet. It has a laxative action and in costive animals tends to regulate the bowels. We do not approve of either boiled or fried liver, since, in our experience, it has been found that animals fed freely with it, develop a disorder of their liver and digestive tract.

Heart.—Beef and lamb hearts are very nutritious and when they can be purchased to a better advantage than beef, there is no reason why they should not be used extensively. They are usually boiled, but may be given raw.

Lung.—The lungs or lights do not make a particularly good food, because they do not contain much nourishment and consequently must be given in large quantities—the thing we wish most to avoid.

Pork.—This is very hard to digest and should not be given in any form. Many dogs that have been under observation have developed a violent gastritis after eating only small quantities of pork.

Spiced Meats.—Liverwurst, bolognet_etc., while not to be condemned for an occasional emergency meal should not be used extensively. They are hard to digest, and being tasty tend to cause the dog to turn up his nose at ordinary meats.

Bones .- Dogs should not be given bones of

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any description. Although they are of value in many ways, their bad effects overbalance their good qualities. Gnawing at bones is supposed to keep the teeth free from tartar, but dry, hard dog crackers will answer the purpose equally well. Should the system require the lime from the bones, the ground bone meal may be given and the dose adjusted so as to prevent constipation. Chop bones are especially dangerous for the dog because they can be broken up and swallowed. The small splinters may be caught in the throat or esophagus, and if they succeed in getting into the bowel they become lodged in the rectum, causing severe constipation and violent inflammation. Often these splinters become so firmly impacted that they have to be removed with forceps. Larger bones may be swallowed whole, obstructing the throat, or they may become fast in the bowel and cause a stoppage which is frequently fatal.

Fowl.—This class of meat may be allowed to a limited extent. Fowl do not possess as great a food value as beef and are more expensive. Dogs do not do as well when fed extensively on chicken. When these meats are served on the family table they may be given to the dog, but their frequent use is not to be encouraged. They are not of any particular value for tempting sick animals.

Fish.—The same may be said of fish as of fowl. They are to be used only when necessary. When they are given, great care must be taken to see that

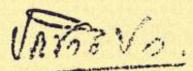
all bones, however small, are removed. The fish should be given boiled or baked, but never fried. Canned fish is not desirable but may be used in an emergency. The fish should never be left in the can after it has been opened.

Dog Crackers .- Dog crackers rank next to meat in their desirability as a food. They may be given alone or with meat, dry, or moistened with hot water or broth. They should not be soaked sufficiently to make them soggy but should be damp sad mealy. There are many good makes on the market, but those which are not too hard are more readily taken by the dog. When the crackers are given moist and mixed with meat, a broken cracker may be purchased which is cheaper and more convenient. For small dogs and puppies a smaller cracker is prepared. This is not as hard as the dog cracker and can be more readily handled by the smaller animals. Puppy meal is a powdered preparation which is excellent directly after weaning. It is used uncooked and mixed to a paste with hot water or broth.

Bread.—While bread does not compare with dog crackers in nutritive value it is often desirable to use it as a filler to produce the necessary bulk for the ration. Stale white bread or rolls may be given dry or moistened with broth. It should never be sufficiently soaked to make it sloppy or soggy. The bread is always broken in small pieces and mixed with the meat.

Cereals .-- Cereals may be added to the diet only when it is necessary to furnish a ration which is fattening. For a thin and hard working dog cereals may be given in large quantities, but for a house pet they are best avoided except in very small quantities as a variety. Since they are very fattening much care must be used in selecting and apportioning them. Their use must be discontinued as soon as the dog begins to take on flesh. Farina, Cream of Wheat, Shredded Wheat, and oatmeal may be used in small quantities for the morning meal. They are mixed with the meat and moistoned with a little broth. Corn meal and rice are very fattening and hard to digest unless thoroughly cooked. Skin troubles are often associated with their use.

Vegetables.—Vegetables which do not contain a large amount of starch can be added to the ration in small quantities to furnish variety and bulk. Of these, spinach is perhaps the best, asparagus, cauliflower, cabbage, and string beans rank next, while onions, beets, carrots, turnips and squash are rather high. Vegetables having a very high percentage of starch are very hard for the dog to digest and should be eliminated from the diet entirely. These are potatoes; beans, corn, peas and parsnips. When vegetables are used they must be well cooked, finely mashed, and mixed with other food. At no time should they make up more than one-third of the meal.



Broth.—Beef and lamb broth may be used to moisten crackers, puppy meal, bread or cereals, but not in quantities sufficient to make the food sloppy. It should not be given as a liquid for the dog to drink except in cases of special feeding. Before using, the fat should be removed from the broth.

Other Liquids.—For the regular diet all liquids except water should be avoided. This includes milk, coffee, tea, cocoa. Few dogs are able to take cow's milk and for this reason it should not be given except in special cases.

Fruits, Sweets and Pastries.—Fruits should have no place in the dog's diet. Dogs that are particularly fond of apples may be given a small piece now and then but never to excess. Candy should be given the dog only as a vehicle for medicine or as a reward for good behavior. The intervals at which it is given should be few and far between. Pastries of all kinds should absolutely be prohibited.

QUANTITY

It is very difficult to formulate rules governing the amount of food that the dog should be given because of the great variance in size of individuals and the difference in the amount of exercise each gets. The best indication is the weight and general condition of the animal. Puppies are expected to gain in weight and increase in size until the fifteenth or eighteenth month. The gain should be

slow and steady, and should consist in enlargement of bone and muscle rather than in storage of fat. The mature dog should remain at about the same weight at all times. Should he begin to take on weight on account of the storing of fat, the indications are that the diet is too rich in fats and starches and probably too great in quantity. On the other hand, if the dog begins to grow thin without showing signs of any diseased condition, the amount of food should be increased in quantities and fats and starches added. Dogs that are excessively fat should be put on a limited diet of raw beef. A fat collie can get along with a tablespoonful of raw beef once or twice a day. Puppies suffering from worms are usually very thin but have a distended abdomen. If the puppy is young and weak it will be necessary to build up his condition before purging him of the worms. Such a dog should be given meat in large quantities in conjunction with cereals, dog crackers, and a few vegetables. A Boston Terrier puppy of three months might require and take care of a quarter of a pound of beef twice or three times a day, one to three puppy biscuits or a cup of Farina and a tablespoonful of spinach at each meal. Until a dog reaches maturity he should be fed intensively on the best of food. After he has reached his growth he should be given as little as possible to keep him in good condition. If he becomes obese he should immediately be placed on a rigid diet until he gets back to normal.

FEEDING

Puppy.—The best food for the newborn puppy is, of course, the mother's milk. Not infrequently the bitch sacrifices her life in giving birth to her brood. In such instance it is advisable to procure a foster mother if possible, because rearing the puppies by hand is a hard and tedious task. If a nursing bitch cannot be found a cat will often take her place admirably well.

Breast Feeding—Care of the Bitch.—The bitch does not, as a rule, have an abundant supply of milk until the second or third day after the puppies are born. The first milk is of a different character than the regular flow, but is suited to the first needs of the pups. The bitch should be kept with her brood most of the time for the first few days. After they have become strong and active she may be taken away two or three times a day in order to obtain extercise. A good mother will, if allowed, spend her entire time with the puppies, and as a result, her own condition becomes run down. Constipation may result from the intensive feeding and lack of exercise. This may be avoided by regularly getting her out of doors.

The bitch must be fed plenty of good, nourishing food and allowed an abundance of water. Milk is not necessary, but if her digestion is good she may be given small quantities mixed with a raw egg. Oatmeal gruel is supposed to produce milk. Good

rich beef broth over her meat and crackers will be beneficial, cereals and vegetables may be given to some extent.

About the twenty-first day the bitch often develops eclampsia. This may to a certain extent be prevented by giving the bitch good food which is easy to digest, plenty of exercise, and by taking pains to keep the bowels open. In eclampsia it is invariably noticed that the puppies have been drawing pretty hard on the bitch, they are usually fat and growing fast, and so if this condition is observed in the early part of the third week, it is well to keep the bitch away from her brood for periods of two or three hours in order that she may have an opportunity to rest.

Inflammation of the breasts occasionally occurs in the early period of nursing. If immediate treatment is given, the bitch can usually go on feeding the puppies.

Care of the Puppies.—The mother usually takes all necessary care of her brood. She attends to their cleaning and to the bowels and urine. It is a very common practice with bitches to desert a puppy should it become sick. This is probably to attract the attention of her master. The sucking pup frequently suffers from constipation and colic. The abdomen will be found distended, hard and painful to touch. An enema of olive oil with a medicine dropper will relieve the condition. A quarter

of a teaspoonful of milk of magnesia may be given by mouth.

Nursing.—Within a short time after birth healthy puppies should start to feed. They are able to move about and find the breast without aid. The amount of food taken at a time, and the duration and frequency of the feedings are regulated by the demand of the body. With a disturbance of digestion the appetite becomes depraved and the puppy gorges himself with abnormal amounts. In such conditions it is necessary to determine the cause and correct ide

Lack of Milk .--- Often when a young bitch has an exceptionally large litter she is unable to supply enough milk for all of them. If the puppies are not of great value a part of them should be destroyed directly after birth or a foster mother may be procured to take part of them. Otherwise about the second week the puppies will begin to show effects of lack of food. Bitches which are in poor health are often unable to care for a normal litter. If all of the puppies become restless, cry a great deal, and nurse frantically, it is suggestive of lack of milk. An examination of the breasts should be made and if no milk is found the puppies should be taken from the mother so that she may rest for a few hours without the puppies removing the milk. After three hours the breasts may again be examined, and if no milk has formed in the interim the puppies will have to be put entirely on the bottle. If a

small quantity of milk is present the puppies may be fed by hand a part of the time and left with the bitch for the remainder, or some of the puppies may be taken from her entirely, leaving the rest to nurse. When the litter is to be bottle fed part of the time, they should be taken from the bitch the first thing in the morning and given two feedings in the forenoon at three or four hour intervals. They should be allowed to nurse the bitch for a short time in the middle of the day, in order to remove the milk already formed. In the afternoon they may be given two bottle feedings and at night put back with the bitch.

Superabundance of Milk.—The bitch sometimes has too much milk, especially when the litter is small or when the puppies have all died or been killed. Puppies are naturally greedy and if there is an abundant supply of milk, they are apt to gorge themselves and later suffer from colic. If the milk is retained in the breasts they usually become inflamed. In either case some of the milk should be drawn from the breasts at frequent intervals.

Bottle Feeding—Care of the Puppies—(1) Temperature.—Keeping the puppies artificially warm is of great importance in rearing orphans. They do not generate enough heat to maintain the proper body temperature. They may be kept in a box in the bottom of which is a hot water bottle well covered with flannel cloth or absorbent cotton. An electric pad may be used but there is danger that the

puppies may be injured if the pad accidentally becomes too hot. In winter the box may be kept on or near the radiator. The sides of the box must be of sufficient height to prevent the puppies from climbing out as they grow older.

(2) Cleanliness.—The puppies must be cleaned every day. The discharges are washed away with warm water and any matted condition of the hair cleaned. A very slight amount of sweet oil or cocoanut oil may be rubbed over the hair to prevent discharge from sticking to it. Neglect in cleaning brings about eczema at any place where the hair is matted. Pus forms under the matted hair, causing it to fall out.

(3) Functions.—Urination may be stimulated by tapping the end of the sheath or the vagina. This should be done at least at every other feeding. If the bowels do not move, the puppy must be given an enema of olive oil. If necessary these may be given every day.

Food.—It is the usual custom in feeding puppies to dilute cow's milk with water. Sometimes sugar is added. Bitch's milk is much richer in fat than cow's milk, but does not contain near as much sugar. It is, therefore, evident that cow's milk instead of being weakened should be enriched for the puppy. Cream contains about double the amount of fat and sugar found in bitch's milk. The top eight ounces from a quart bottle of the average cow's milk which has stood for eight hours to allow

the cream to rise, will contain about the right quantity of fat, but will be heavy in sugar. Eggs contain about the same amount of fat, but no sugar. A prepared milk may be made by diluting cream with an equal amount of water, by taking the top of the bottle of cow's milk, or by adding a raw egg to half a cup of whole milk. Of these formulas the first most nearly corresponds to the bitch's milk. The puppies may be fed with a medicine dropper or a small bottle may be arranged with a nipple.

Feedings .- First week: Puppies are fed at two hour intervals from 7 A. M. to 7 P. M. and at three hour intervals during the night, making ten feedings in the twenty-four hours. Ouantity: one-half to one teaspoonful, increased if there is no distress and if the puppies act hungry. Second week: Feedings every three hours during the day from 7 A. M. to 7 P. M. and every four hours during the night, making seven feedings during the twenty-four Quantity: increased according to the aphours. petite and condition of the puppies. Third week: Feedings every three hours during the day from 7 A. M. to IO P. M. with one feeding during the night, making six feedings during the twenty-four Ouantity: Increased to meet the demands hours. of the puppies. One teaspoonful of beef juice is allowed each day. The puppies should be encouraged to lap milk from the finger and later from a Fourth week: Feedings continued at the dish same intervals. Quantity: Increased as necessary.

More beef juice can be given. As soon as the puppies lap the milk freely weaning may be started.

Weaning-Bottle Puppies.-It is essential that the bottle puppy be weaned as early as possible in order to eliminate much of the work of caring for it. As soon as the puppy readily takes his milk from a dish a small quantity of puppy meal, farina, or Cream of Wheat may be mixed with it. At first only sufficient should be used to make a thin paste, later it may be gradually thickened. This may be given only at one meal, but slowly it may displace the plain milk feedings. As soon as the puppy is getting the solid food entirely, the number of feedings can be decreased to every four hours during the day, with one feeding at night. Beef broth is, then, gradually used to take the place of the milk. Beef juice is given once or twice a day in teaspoonful doses. Raw scrapped beef is next used in connection with the puppy meal, starting with a half teaspoonful once a day and increasing the amount and number of feedings as the animal becomes accustomed to it. Boiled beef may then be substituted for the raw meat, for a part or all of the feedings. During this time the amount of puppy meal may be increased if it is indicated. By the time it is six weeks old the puppy should be getting the beef and puppy meal exclusively. Water may be given as soon as the puppy begins to lap.

Breast Puppies.-Unless there is some special reason for it they need not be weaned until they

are six weeks old. At that time the bitch will ordinarily superintend the procedure, herself. Their weaning may be hastened by offering the puppy food along the lines described for the bottle puppies. If they readily take food weaning may be hastened with advantage.

From Weaning to Four Months.—By the time the puppies are eating their meat and puppy meal well the night feeding may be discontinued. Four feedings during the day will suffice, but one of these should come just before bedtime. Gradually cereals may be added to the diet, together with a few vegetables, such as spinach, string beans, and carrots. These should be well cooked and mashed. The tendency for puppies at this age to overeat must be controlled carefully. Worms or rickets, if in evidence, should be treated. Eczema and falling of the coat will appear if the digestion is not good.

Four Months to a Year.—At four months the feedings may be reduced to three a day. Puppy crackers may be substituted for the meal. Meats other than beef can be used. If the animal is doing well more vegetables may be given. If the appetite is especially good the crackers can be given dry. Stale bread or rolls can take the place of the crackers to some extent. The condition of the dog will regulate the amount of food to be given. After nine months two feedings a day are sufficient. Dog crackers may now be given if desired.

Mature Dog.—All grown dogs should be fed at least twice a day, for if they are required to consume in one meal all their body needs for the twenty-four hours, the stomach becomes excessively dilated and in time digestion is affected. The meals should be spread out as much as possible but the evening meal must not be given too near bedtime. Regularity is very important. The feeding time should vary but little from day to day. Stomach upsets can easily result from carelessness in the way the food is given.

The amount of food the dog receives must depend on his physical condition rather than his appetite. Dogs are as a rule very greedy eaters, and if given their own way will eat all they can hold. This is the mistake most commonly made and is the cause of a great deal of the dog's trouble. The dog should be kept in good trim condition, just fat enough to round the body nicely. A dog is too thin when his ribs stand out plainly, but he is altogether too fat when they are so covered that it is hard to distinguish each individual rib.

Meat should make up a substantial portion of the meal. From this is derived the nutritive material which feeds the body cells in compensation for the wear and tear of the body activities. Fats and starches are needed for the production of heat, and to make the fat of the body. For inactive animals but little of this kind of food is required. Meat, however, is so concentrated and so thor-

oughly digested and assimilated that some other food is needed to add bulk to the ration. Dog crackers, cereals and bread are used for this purpose. Vegetables are given largely for the iron they contain and to offer variety to the diet.

For the morning meal, raw or boiled beef may be used, or some suitable meat, if any remains from the previous evening meal. This can be mixed with cereal, dog crackers, or toast. Farina, Cream of Wheat, Shredded Wheat or oatmeal may be given if available. At night if suitable meat has been used on the family table there should be sufficient of the less desirable portions left, which, if ground through the chopper, would make a very palatable meat for the dog. This can be mixed with crackers or bread crumbs, which have been moistened with broth. If a proper vegetable is available, a small portion may be added. In preparing the crackers or bread, too much emphasis cannot be placed on the fact that they should be moistened, but not soaked. They are broken into a dish and the broth is poured over them only to be immediately strained off. This will leave the crackers mealy, but not soggy or sloppy.

Important Points on Feeding—Special Feeding.— Dogs that are thin but thoroughly digest their food may be given a liberal allowance of crackers, cereals, and vegetables. Cereals especially, are fattening. If the dog is very weak a liberal portion of meat should be allowed and in addition raw

eggs may be given either over the food or with a small quantity of milk as a drink. This is frequently given in place of water when the bowels are inclined to be loose. Bone meal is also serviceable in chronic diarrhea.

Dogs that are very fat should be placed on a restricted diet in order that they may regain proper proportions. The food should consist largely of meat in very meager amounts. A tablespoonful of meat is sufficient for a collie that is excessively fat.

Overfeeding.—The most common error in the care of the dog is overfeeding. Few people are satisfied unless the dog has eaten all that he desires. After he has had his fill they leave a portion in case he should get hungry later. Such indulgence, while prompted by a spirit of kindness, is very harmful to the dog. He, of course, grows fat and lazy and though no trouble may ensue for a long time, sooner or later the results become evident. It is a great hardship to a dog to be placed on a restricted diet after having been allowed all sorts of food in abundant quantities.

Improper Feeding.—Dogs suffer more than any other animal from improper food. This trouble begins with puppies as soon as they are weaned. They are almost invariably given large amounts of cow's milk and for the majority of dogs this is very harmful, because they gorge themselves so as to obtain sufficient nourishment. To this is added bread, store crackers, cereals and potatoes, all of

which contain a large amount of starch and little protein. The sloppy diet is, in particular, conducive to indigestion, and is usually continued until trouble results. The fear of meat is, to a large extent, to blame for most cases of improper feeding.

Forced Feeding.—In some dogs that refuse food, it is necessary to supply nourishment to the body. The simplest method consists in feeding liquid foods by means of a spoon or syringe. When these are placed in the mouth the dog will usually swallow, but in some cases they absolutely refuse to do so. The nostril may be closed to prevent breathing in an attempt to induce the dog to take the food, but this must be done carefully to avoid choking. If after the dog has been thus fed, he vomits, no further food should be given till the stomach has been put in shape to receive it.

Food may also be given by the rectum. An enema of soapy water is first given to free the lower bowel of fecal matter. It is washed out with a weak solution of table salt and then the food is slowly injected.

For artificial feeding a raw egg beaten with two tablespoonfuls of milk is perhaps the best. Beef juice is very nourishing, broth may be given and for rectal feeding oatmeal gruel is very good.

WATER

The healthy dog should have free access to water at all times, except after a long hard run, when he

is very warm. At such times he should be given only a small amount at a time until he has cooled off. Water must be withheld when the dog is suffering from:

Weak Stomach.—The dog should not be allowed a drink of water for a half hour after eating. At other times he may be allowed a reasonable quantity.

Gastritis.—Even small amounts of water will induce vomiting when the stomach is badly inflamed. The thirst should be quenched by lapping cracked ice. Only a few laps should be allowed at a time.

Diarrhea.—In the early stages a limited amount of water may be given. Should the diarrhea become severe water must be withheld and liquids supplied the system in the form of egg and milk or oatmeal gruel in small quantities and at frequent intervals.

Chronic Diseases.—In chronic diseases of the liver and kidneys when the thirst is abnormal, buttermilk may be substituted for water.

CHAPTER VI

TRAINING THE DOG

Good manners and clean habits are the chief assets of the pet dog, and even though he may possess a wonderful pedigree showing the best of breeding, if he does not display evidence of proper training, he will find no friend in the home. Training an animal is simply a matter of education, and in the dog the possibilities are far-reaching, for his amiability, intelligence, power of reasoning, and wonderful instincts are coupled with a devotion and faithfulness to his master that prompt him to obey his every wish. When these traits are developed the dog is a far more agreeable companion than one that has been allowed to grow up without proper attention to his mental powers. To be well trained the dog does not necessarily need to do tricks. While this is amusing to the owner and sometimes to the animal, it has no bearing on his fitness for the house.

The effect of training is evidenced in the dog by his refined and dignified appearance. He develops a keen, intelligent expression as compared with the dull, stupid, sleepy look of the undeveloped dog. He becomes attractive and wins the admiration and love

of all who come in contact with him. He is alert and prompt in responding to commands and complaisant in carrying them out. The man who carefully educates his dog profits much by the experience, for he will find that by thoroughly studying the dog, he will himself learn many interesting things concerning animal nature, and the power of development.

TRAINING AGE

The dog's training should begin while he is still a small puppy, for when it is started early the undertaking is much easier. Of course at an early age the progress will be slow, but the influence of the owner's attentions will show marked effects on the disposition of the animal, even if no definite habits are developed. If the dog's education is neglected until he is six or eight months old, he will have acquired many undesirable habits that will be very hard to correct. But if the dog changes ownership at this time and is taken into new surroundings it will not be so difficult to control his actions providing the training is commenced immediately. At such an age the dog will be capable of absorbing more knowledge and will be able to conceive more readily what is desired of him. Many dogs, however, develop, as they grow older, a very obstinate disposition which is almost impossible to conquer.

Training the Dog

METHODS

The owner must first develop in his dog a feeling of trust and a desire to please. He must conduct himself in such a way that the dog will have no cause to fear him. He should never shout at the animal nor scare him. If the dog is naturally timid he must approach him carefully, at the same time talking encouragingly to him. No attempt should be made to control his actions until the fear is overcome. The dog should not be asked to do anything that will frighten or harm him nor should he be forced to do that which he does not understand. By liberally praising the dog when he does do right and rewarding him, a desire to please will be stimulated.

When the dog has learned to trust his owner he must then be taught who is master. While the owner-must not force him to do what he does not understand or is unable to do, he must always finish what he starts. If the owner desires, for example, to give his dog a dose of castor oil, that oil must be given before he calls quits, if it takes an hour, with three people to hold the animal; otherwise he will never be able to give him oil or anything else. To be a desirable pet, the dog must learn to obey the will of his master, but the master must be fair and reasonable in what he expects of his dog.

In teaching the dog a task, he must be repeatedly

shown what is expected of him until the owner is absolutely sure that he thoroughly understands. Once accomplished, the deed should be frequently repeated until he is familiar with it. The dog must not be punished until his master is certain that he knows what is wanted. He should first attempt to coerce him by coaxing and talking to him or by bribing him with bits of meat. If he fails to respond he may be sharply scolded; if this is of no avail he may be punished. A strap or switch should always be kept for this purpose alone, and the owner should never hit with his hand or with anything used about the dog, or the dog will always be expecting a licking.

The mind of the dog is capable of much development if the owner is interested enough to stimulate it. He can comprehend much from a conversation of simple words such as would be used with a child. In giving commands, however, the same word should always be used for the same act, and the tone of the voice should always convey the spirit of the command. A reprimand should be sufficiently harsh to convey the necessity of obedience.

MANNERS

In the House.—The dog must be taught to respond to his name, to come when called, or to lie down when told. He should learn in what room he is forbidden and on what furniture he must not

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lie. He should be accustomed to having his meals served for him in a certain place, at a certain time, and should be absolutely forbidden the room during the family meals, and especially should he learn not to coax for food from those at the table. He must be taught not to play with and tear up shoes, or other articles of clothing. He must learn not to scratch the rugs or chew the furniture. He must be accustomed to his bath and to the brush and comb. He must learn to submit to being handled, to have his mouth opened and examined, to have his ears cleaned, and to take medicine.

On the Street.-It is guite important that the dog be taught to walk quietly at heel if he must be taken on the crowded street for exercise. This is not a difficult lesson, but is more easily taught older dogs than puppies, for there is considerable danger of breaking their spirit by being too strict at an early age. Puppies are naturally restless creatures with an inquisitiveness which leads them everywhere, and this, to a certain extent, should be encouraged. But, of course, endless trouble will be provoked if the dog is allowed to chase about the sidewalk jumping at people or getting in their The dog should also be prohibited from way. sniffing at other dogs, both because of the danger of contracting disease, and provoking a fight.

When on the street, the dog should be controlled by a leader attached to his collar or harness. He may want to run in front, and while this is all right

it is much better for him to follow his companion close at the heel. When teaching this to the dog the owner should shorten the leader as much as possible. If the dog tries to go in front of him as he starts to walk, the animal should be pulled back, at the same time, receiving the command to heel. If the dog persists in running forward he may be lightly tapped on the nose with a light switch. As the lessons progress he will soon learn to jaunt along behind his companion.

With Strangers.—It is well that the dog be not too friendly with strangers, for it tends to destroy his individuality and unfits him for protection as a watchdog. On the other hand, the pet dog must be made to understand distinctly that he must not show fear or distrust of strangers into whose hands he has been put by his master. This is of special benefit when it is necessary to leave the animal in the care of a stranger at vacation time, or when the veterinarian has to be called. Nothing is more annoying to the busy practitioner than trying to help an animal which he cannot handle without using hard tactics. The dog may, however, be taught to attack, at his master's command, any strangers who attempt to enter the house or harm his person.

HOUSE BREAKING

Cleanliness about the house is very essential in a pet. Every puppy must be taught where he is to

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clean himself, for they have no other way of knowing. In the apartment where a pan of sawdust or newspaper is provided, it should be so placed that the animal can at all times have access to it, and it should always be kept in the same place. This should be made ready before the dog is brought into the house. As soon as he arrives he should be immediately taken to the paper, and if possible, kept there until he uses it. The paper is then left as it is, so that later in his travels about the house when he comes upon the paper, he is attracted by the odor and is induced to use it again. In this way the habit is formed, for once a dog has made use of a place he is prone to return. Of course, sooner or later, he is bound to misbehave, and then he must be shown what he has done and severely scolded. If, however, he persists in this, it will be necessary to punish him, providing this can be associated with the misbehavior.

Where it is desirable that the dog should go out of doors to care for himself, it will be necessary to take him out as soon as he arrives and keep him out until he cleans himself. While in the house he should be carefully watched for signs of uneasiness; this is warning to take him out. After a while he will learn that by going to the door he will be taken out and when he has acquired this habit he should always be attended to when showing this desire. With a little care the dog can be

regulated to go out at certain hours and will care for himself at these times. He should have this opportunity at least twice, and better four times a day, one of which is the last thing at night.

CHAPTER VII

SELECTION OF THE DOG

BREED

The pleasure derived from the dog depends largely upon the wisdom shown in the selection of the breed best suited for the conditions under which he is to be kept. The work of the dog covers such a wide range of duties, for each of which a specific breed has been developed, that there is a great variety from which to choose. The characteristics of the individual breed have been acquired in compliance with the requirements of the service for which he is intended. The physical development of the dog is in direct proportion to the activities and strenuousness of his work, and his manner of living is in conformity with it. Although the dog is very adaptable to environment he cannot fit his mode of living to conditions which differ too greatly from his natural habits, without disastrous results to his health. And so in selecting a dog, one should be chosen whose natural environment most nearly conforms with the accommodations available.

Qualifications.—The suitability of the dog for the house depends chiefly on the amount of exercise he requires as compared with the owner's ability to

supply it under the conditions at hand. Although the size and conformation of the animal must also be taken into consideration, they are the factors which generally determine the exercise requirements. Certain breed peculiarities and the purpose for which the animal was bred must also be considered.

Size.—No class of animals varies so in size as the dog, who ranges from the toy of one pound or less to the St. Bernard of two hundred and fifty. It is evident that the housing requirements of dogs of different sizes are unlike. The toy could not be allowed to roam about the streets at liberty nor should the St. Bernard be confined to the limitations of the small apartment. In order more clearly to bring out the differences in size of the dog, the various breeds, which are usually chosen as pets, will be roughly grouped in classes according to their size.

CLASSIFICATION OF THE BREEDS

Toys

(under twelve pounds)

Pekingese Japanese Spaniel English Toy Spaniels: King Charles Prince Charles Blenheim Ruby Pomeranian Skipperke Terriers: Yorkshire Maltese Toy Black and Tan Toy Bull Toy Poodle Brussels Griffen Chihuahua Mexican Hairless Pug

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Small Dogs

(twelve to twenty-five pounds)

Terriers: Boston Fax Smooth Wire-hair Black and Tan Skye Terriers: Scotch West Highland Sealyham Cairn Dandie Dinmont Welsh Bulidogs English French Dachshund

Medium Dogs

(twenty-five to fifty pounds)

Terriers: Irish Airedale Bedlington English Bull Doebermap Pinscher Hounds: Beagle Bassett Pointers Cocker Spaniel Dalmatian Samoyede Spitz Chow

Large Dogs

(over fifty pounds)

Shepherd Dog Belgian Police Dog Engliah Sheep Dog Collie Spaniels: Irish Clumber Field Setters: English Irish Gordon Retrievers Greyhcund Bloodhound Deerhound St. Bernard Newfoundland Great Dane Mastiff Chesapeake Bay Dog Eskimo Dog

Conformation.—The conformation of the dog alters to some extent the amount of exercise he needs. The bulldogs, notably the English, while much heavier than others of their class, do not require much exercise because of their peculiar

build. Their short crooked legs are not able to carry their heavy bodies at a very fast pace, and because of their short mushed nose it is hard for them to breathe. The other extreme is the Whippet or the Italian Greyhound, for while they are light weight dogs, they are built for speed and endurance and consequently require much freedom.

Characteristics-Toys.-Because of their suitability as house and lap dogs the toys have become very popular. Being of diminutive size and delicate construction, they are well adapted to confinement since they require a minimum amount of exercise. They usually belong to women or children and there is a great tendency among such owners to cater to their pettish whims until they virtually become slaves to their dogs. Such conduct, while intended as a kindness, is really a cruelty, since the exceedingly low vitality of these animals is due to such treatment rather than to any abnormality in their conformation. This statement can readily be corroborated by observing the difference in health of the dog kept in this manner, and that of the same type treated as he should be. In selecting a dog. the toys should not be rejected by lovers of real dogs because of prejudice based on the spoiled specimens which may have been seen, for they are really very desirable companions when given the proper chance.

(1) Pekingese.—The Pekingese is by far, the most desirable of all the toys. He is a strong, rugged,

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healthy little animal and consequently very resistant to disease. He is somewhat exclusive in his friendships and occasionally exhibits a marked degree of temper. His courage and boldness often acquire for him an immunity against much deserved punishment. Although seemingly combative, when it comes to a showdown he is mostly bluff.

(2) Pomeranian.—The Pomeranian is a bright, active, and affectionate little dog. Being very timid and highly nervous he is often snappy with strangers. He is not so vigorous as the Pekingese nor does he possess as great a resistance to disease. This weakness has been much exaggerated in late years by the tendency of breeders to strive to produce exceptionally small specimens.

(3) Poodle.—The Toy Poodle by far outnumbers all other toys. He is supposed to be very intelligent and is used extensively in animal acts. Although toward their owners they are most affectionate and loving, with others they are the most treacherous dogs living. It is because of this that they are so unpopular with all who are called upon to handle strange dogs. Poodles are very sickly animals, suffering much from indigestion, eczema and acute pulmonary diseases. The eyes, almost invariably, discharge a serous fluid which discolors the hair around them. Their long white coats require much combing and bathing.

Small Dogs.-The terriers of the second group, with the exception of the Boston, were developed

because of their value in unearthing small game and vermin which seek refuge in burrows. Since they are expected to dig out their prey rather than pursue it through the open field, they are small, compact, and muscular. They are built low to the ground, and for this reason require only a limited amount of exercise. Through necessity they are courageous and daring, and are born fighters. Notwithstanding this they are amiable creatures and make wonderful companions.

(1) Fox Terrier.—The Fox Terrier is one of the oldest and best known dogs. He is a very affectionate, courageous, and cheerful animal with an alert expression, quick and active ways. As a rule he outlives all other breeds, often reaching sixteen and eighteen years of age; occasionally he has been reported to have lived for twenty years. Because he is too often overfed he frequently becomes fat, unsightly, and asthmatic. If reared with children he makes a wonderful companion and protector for them, but when he is not used to them is not to be trusted.

(2) Scotch Terrier.—This is the nicest allaround dog for the house. He is a short-legged, stockily built, rough-coated animal, possessing a most wonderful disposition. He is very eventempered and gentle, and while not snappy with strangers, possesses a total indifference toward anyone but his master. His trustful eye, homely comeliness, and whimsical playfulness combine to endear

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the Scottish Terrier strongly, and no dog is more companionable or affectionate. The Sealyham, West Highland, Cairn and Dandie Dinmont all resemble the Scotty, except for color markings.

(3) Boston Terrier.—The Boston Terrier is an American made dog developed by crossing the English Bulldog and the Bull Terrier. This dog has been bred, at least in late years, strictly as a high class pet, and the results are very satisfactory. He is a bright, playful, courteous little dog, stockily built and well proportioned. His average weight is twenty pounds; however, he is most desired in the show ring at twelve to fifteen, but at this extreme is apt to lose his rugged constitution. He makes a desirable companion for any member of the family from the child up.

(4) Dachshund.—The Dachshund or Badger Dog, as he is now known, is a mixture of hound and terrier, developed to enter a badger hole and attract the animal's attention while he is being dug out. This accounts for his extremely short legs and long body. His disposition and manners well fit a house dog.

(5) Bulldogs.—The English and French Bulldogs, while not belonging to this class as far as weight is concerned, are grouped here because of their fitness for the house. They are too shortlegged and too short-winded to require much freedom. The English Bull is a good-natured gentle dog, in spite of his forbidding appearance, and

makes a safe and dependable family dog. The French is more exclusive in his friendships, not so extreme in conformation, and for this reason more desirable. Both dogs are excellent with children and of exceptional value as watchdogs.

Medium-sized Dogs.—The terriers of the third class are much larger and more active than those already described. They are more rangy in type and are strong and husky. Because of their size and activeness they require much freedom and should not be confined to city flats. They are "real dogs" and make suitable companions for men.

(1) Airedale.—The Airedale is the most popular large terrier in this country. He is fearless and, though not particularly quarrelsome, never avoids a fight. He is very intelligent, companionable, and frolicsome.

(2) English Bull Terrier.—This is a beautiful and refined dog that will always attract attention. He is popularly known as the fighting bull terrier, and often carries his battle scars. When kept in close confinement he grows fat and lazy and becomes unsightly.

(3) Doeberman Pinscher.—While this dog is a comparatively new dog in this country, his delightful personality should fast bring him into favor. He is a "one man" dog and does not readily make friends. But he is ever faithful and loyal to his owner.

(4) Dalmatian.-This dog is of undependable

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disposition. Occasionally a specimen may be found that is good-natured and friendly, but as a rule they are very reserved and repel the attentions of anyone but the master. He is a very active dog and requires a great deal of freedom. In New York he has come to be known as the fire dog, because of the frequency with which he is found about fire houses.

The Spitz, Samoyede, Chow, and Eskimo dogs all have the same general characteristics, varying only in size and color. They are strong, compact, and husky, liberally covered with hair to protect them from the severe cold of their native lands. Although quite popular as pets it is hardly justifiable to confine them to the house because of their heavy coats. They possess a very savage disposition which even their most intimate companions find difficult to control.

Large Dogs.—All of this group of dogs are, in their natural state, hard working animals. They are bred for duties which require strength and speed. Some of the largest, notably the Great Dane and the St. Bernard, have the most amiable dispositions and cool even temper, which particularly fits them as companions for children. Their huge size, however, eliminates them as pets except where unlimited freedom can be provided.

(1) Collie.—Of this class of dogs the collie is most frequently seen in the city. This dog, a native of Scotland, was developed to herd the flocks over

the hills and mountains in all sorts of weather. To bring him into the city and confine him as is necessary, is very unjust to the animal as well as unsatisfactory to the owner. This is unfortunate because the dog is very desirable as a pet, but when his freedom is limited disastrous results are bound to follow sooner or later.

(2) Shepherd Dog.—Of late this dog has become very popular and is finding his way in large numbers into the city. He is a typical "one man" dog and is unexcelled as a watchdog. In fact he is used extensively by the police for patrolling the outlying districts of the city and has won great favor by his skill in running down marauders. It may be seen that this dog, being strongly built and husky, requires much more liberty than he can possibly obtain if kept in the city home.

Accommodations — Apartment House. — In the city and, especially in New York, the great majority of dogs, as well as people, are, from necessity, confined to the limitations of an apartment. Such surroundings do not offer the dog much opportunity to live a natural life. The house is usually crowded with furniture and it is impossible for him to romp about. For exercise he must be taken to the roof or the street. He cannot be turned loose but must follow his master at a slow pace. The duration of such exercise depends wholly on the owner's available time or his inclination to walk.

Large dogs should be left entirely out of con-

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sideration when selecting a pet for the aparament house. It is a great injustice to force a dog, used to his freedom, into such confinement, for he is little better off than the criminal in jail. The Collie, Shepherd, Russian Wolfhound, Great Dane, Airedale, and Irish Terrier are all too large and active for these close quarters.

Even with these large dogs eliminated there is still a large number of breeds from which to make a choice. The toys are specially adapted for the apartment. They have been bred and developed precisely for such surroundings. In this class of dogs there are sixteen choices of which the Pekingese, Pomeranian, Toy Poodle, Maltese Terrier and the English Toy Spaniels are readily available at reasonable prices. The Skipperke and Brussels Griffon are comparatively rare specimens for those who desire something different from the ordinary. Of the small dogs, the Boston Terrier, Fox Terrier, Black and Tan, and the Dachshund are common breeds; while the Scottish Terrier group are more exclusive.

House and Yard.—Where a yard can be supplied in which the animal can spend a large part of his time, the range of choice can be considerably broadened. Even though the dog does not exercise a great deal, he will derive great benefit from the open air and the feeling of freedom. Cats, birds, and children offer a source of amusement which tends to keep the dog in action. During the winter

months he is stimulated to exercise by the cold. Becoming hardened to this exposure the dog is much less apt to fall prey to pulmonary diseases or distemper. Besides the dogs of the second group, the Chow, Samoyede, Spitz, and the terriers of the third group are all adaptable to such conditions. The Airedale is almost too large and active, however, for even this amount of freedom. The Collie does not do well even when allowed the freedom of the yard.

Country Estate.—For those who enjoy the pleas-. ures of a country home, with abundant grounds, the choice of a dog is purely a matter of fancy.

Suitability to Purpose.—The suitability of the dog for the purpose for which he is intended is, from the owner's standpoint, very important. Most of the city dogs are kept solely as pets, yet some are used as watchdogs and a few for sporting purposes. Many dogs are kept in the apartment for breeding, but the practice is not to be encouraged, because they lead such an abnormal life that they are not very successful as breeders.

The Pet.—The disposition of the pet dog should be harmonious with its owner's, providing it is to be the property of any one member of the family. Each individual will have his or her ideas as to the type of dog desired. Men, as a rule, prefer a large or medium sized dog, that is strong, active, playful, and intelligent. He should be fit for long hard romps, of sufficient courage and fighting ability to

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protect himself and his master. A dog that readily learns little tricks is often a favorite with a man. The Airedale, Irish and Boston Terriers, the French and the English Bulldog, the Chow and the Doeberman Pinscher are all typical men's dogs. Most women desire a small, soft, cuddly, long-haired dog which can easily be carried on the arm. They must be even-tempered, have a loving, peaceful disposition, and above all be clean in their habits. The dog must be of the type that is fond of much pampering and petting. The Pekingese and Pomeranian are representatives of this type. The small terriers, especially the Scotch and Sealyham, make wonderful pets for women. Among the large dogs, the Collie and Greyhound are excellent.

In selecting a dog for children great pains should be taken to obtain a suitable companion. Children, though not meaningly so, are generally very rough and abusive to their toys and pets. They frequently slap the animal, throw sticks at him, pull his hair or tail, and in general maul him about. Some dogs will tolerate this treatment with apparent enjoyment, while others absolutely will not endure it. Dogs that have been brought up from puppyhood with children usually play very carefully with them. Still it is more or less of a breed characteristic. Many stories are told of the gentleness of the St. Bernard in caring for children. The Fox Terrier, when reared with them, usually plays well with children, but if brought in when a mature dog

is not to be trusted too far. The English Bulldog makes an excellent playfellow and protector of the child. Long-haired dogs should be avoided, dogs that are too large and boisterous are apt to hurt the small child in harmless play, and the fighting dog should never be chosen.

The Watchdog .- It is highly important that a watchdog should possess sufficient sagacity and intelligence to enable him to discern between friends and foes, and to distinguish harmless visitors from questionable characters. If the dog is simply expected to give notice of the appearance of strangers by barking, one of the smaller breeds, such as the Fox Terrier, will prove most desirable, for they are more wide-awake, as a rule, than the larger breeds. If the dog has to protect property without human assistance, one of the larger breeds should be selected. The Shepherd Dog is especially adapted to this and has been trained for the purpose. The Bulldog's reputation for ferocity makes him a valuable watchdog and protector, for few people will take liberties with him.

Sporting Dogs.—Dogs have been more highly developed for hunting than any other purpose to which they have been put. The instinct for their particular work is so firmly instilled in the breed that in many instances puppies go about the work without any training from human sources. The sportsman will be interested in the dog particularly

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adapted to his branch of sport and no other dog can take his place.

Evil Points—Coat.—No dog can be found which will be ideal, each will have some drawback. It is well at this point to mention some of the offending details. The heavy-coated dog is bound to be a nuisance about the house while he is shedding. This process is, at best, prolonged, and the hairs attach themselves to the carpets, chairs, and clothes, and are not readily removed. During this period the coat looks rough and detracts much from the animal's appearance.

Color.—White dogs are not to be desired, because they must be bathed much more frequently than dogs of a dark color. This is not only troublesome, but paves the way for skin diseases.

Noisy Dogs.—Dogs that bark loudly and a great deal are not desirable in the apartment house because of the disturbance it may cause. As a rule, dogs are not welcome in any apartment, and tenants are sure to object to a noisy animal. This often leads to the exclusion of all dogs from the house.

Disposition.—Ugly dogs should never be kept where many people congregate. They are never to be trusted and often a dog with a surly disposition will attack a person apparently for no reason at all. Trouble brought about in this way is very hard to dispel.

INDIVIDUAL

After deciding upon the breed that is most suitable for the conditions at hand it is next necessary to select the individual dog. This is by no means a simple task for the novice. Among the important considerations, the first is the proper age at which the dog will be acquired.

Age—Puppy.—During the first year the dog passes through the most interesting period of his life. No one, whether or not he cares for dogs, can help being attracted by the mischievous and playful pup. When reared in the household, he becomes much more attached to his masters than does the dog that is brought in as a mature animal. When young children are to play with the dog it is better that he become used to them while he is still young. The dog can be more satisfactorily trained as a puppy. The health of the grown dog depends a great deal on the way he is cared for during the first year, and no puppy that has had improper treatment will ever attain the same development he might have reached if he had had the proper start.

There are as many arguments against buying the dog while a puppy as there are for it. During the early weeks of his life, the puppy is very frail and susceptible to outside influences. At weaning time it is often hard to get food which will properly agree with his system. Neglect at this time often causes systemic disturbances which are difficult to

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correct. Puppies are frequently infested with worms, though not as often as some would have us think. Because of this popular fancy, many very young puppies have been so severely dosed with worm concoctions that their sensitive digestive mechanism has become greatly impaired.

At from three to four months puppies frequently suffer from indigestion, worms, rickets, and eczema, all of which, though not particularly dangerous if attended to, may, when neglected, prove fatal. During the first year the dog is very susceptible to distemper and until he has acquired a natural resistance this disease is very fatal, accounting for more deaths than any other puppy ailment.

The development of the dog is very uncertain. Even those who are experienced in handling dogs find great difficulty in forecasting the future of the pup. Puppies that show promise of developing into beautiful specimens of the breed often turn out to be complete failures; while others which show no prospects, when young occasionally develop to be winners. This is more or less true of all breeds, but is especially so in those where size and coat are of prime importance. When the puppy fails to develop to the expectations of the owner, he will be likely to overlook the discrepancy because he has become so attached to the animal that he will not give him up.

Mature Dog.-In the purchase of a full-grown dog the initial cost will, of course, be greater, but

considering the work of rearing the animal and the possible fatalities which the breeder must expect, the price is not so high in proportion as for the puppy. A dog at ten or eleven months of age at seventy-five dollars is cheaper and a better buy than a two months old puppy at twenty-five.

If the dog has had proper care, at the age of one year, he should be a vigorous, healthy specimen, possessing sufficient resistance to combat disease successfully. On the other hand, if he has not had the care, his condition will show it. By this time the food should have been so regulated as to agree best with his conditions, and any deviation from the regular diet should not cause any serious upset. If the dog has suffered from rickets, the ailment will have been entirely overcome or otherwise be so noticeable that the most casual observer could not help but recognize it. He will have attained his full development and any faults will be in full evidence.

Taking everything into consideration, the best age at which to purchase a dog is from ten months to one year.

Old Dog.—It is very unwise to take a dog past three years old. At the best his span of life is short and if his early years are already spent he rapidly declines into old age. By the time he has become a recognized member of the family, he has reached an age at which his owner may expect to lose him.

State of Health .- When purchasing a dog it is

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exceedingly important to know whether or not the dog is sick. The man who has had considerable experience with dogs will be able to determine this with fair accuracy, but he who is having his first experience had best employ a veterinarian to make an examination of the animal before it is accepted. When paying a large price this procedure is a good insurance.

In making an examination of a dog, first observe his general condition. Do not mistake an overdistended stomach for flesh. If the dog is very thin, some debilitating condition is present, and the animal should be rejected. The expression should be bright and the dog active. If he is dull and listless, his vitality has become lowered by some abnormal condition. The eyes should be bright, clear, and free from discharge. This may have been recently wiped away, but if not, the hair and skin beneath the inner corners of the eve will be soiled. The hair should be soft and glossy. A dull coat is significant of disease. The skin should be carefully examined for patches void of hair, areas of redness, scabs, sores, and mats of hair. In small puppies the hair is often soiled by the fecal discharges. When this is not cleaned away frequently the hair becomes matted, the skin underneath is irritated, and eczema develops. Careful tickling of the throat will induce a cough should the dog be suffering from laryngeal or bronchial trouble. Rough manipulation, however, will cause coughing in a well

and healthy animal. If diarrhea is present to any extent, the rectum will be sore and inflamed. In dogs where the tail or ears have recently been trimmed be sure that healing has taken place.

The general contour of the dog should be given consideration. Bowed legs or enlargements of the joints are suggestive of rickets. The dog should be placed on his back and the abdomen examined for swelling, which at the navel or in the groin are indicative of hernias or ruptures. These are especially common in Pekingese. Do not allow the salesman to explain away any abnormal condition, especially if he seems to make light of it, for it may be of a serious nature.

The conditions to be especially looked for in young dogs are, distemper, eczema, mange, rickets, hernias, and intestinal disorders. Distemper may be recognized by coughing, sneezing, discharge from the eyes or nose, diarrhea, emaciation, and a general look of weakness. Eczema and mange are almost identical in their outward aspect. A diagnosis can be made only by use of the microscope, and so a dog having any sort of skin lesion should be looked upon with suspicion. In rickets the forelegs become bowed and at the wrist, or first joint up, there is a distinct hump. The hind legs bend inward so that the hocks come close together. The hair is dry, dull, and staring. The dog is thin and the abdomen much distended. Although the dog may be playful he soon becomes tired. Intestinal dis-

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orders, as indicated by poor appetite and diarrhea, are very common in caged dogs. Such a condition is difficult to correct and is frequently fatal. The dog should not be accepted if he shows the slightest tendency toward loose bowels.

Breed Characteristics .- The importance of the breeding depends upon the sort of dog desired and the amount of money to be expended. Naturally the scrub dog would show no signs of good breeding, and the price must be correspondingly low. In well-bred dogs the value increases in proportion to their fitness as specimens of the type. It is very difficult for anyone not acquainted with the prevailing market prices of the particular breed to determine a fair value of a dog in question. The amateur when paying any considerable amount for his animal would do well to employ some one acquainted with the breed to help in the selection. Otherwise it will be necessary for him to make an exhaustive study of the breed from descriptive literature, and by visiting the dog shows. He must obtain a working knowledge of the points of value in the type which he desires, but he must remember that no perfect dog has yet been bred and therefore he will find faults in all. The ability to choose the one in which the faults are of the least consequences will show to what extent he has studied his dog.

Disposition and Manners.—The disposition of the pet dog is a very important characteristic. Ugly, snappy dogs are not desirable around the house.

Unless the dog will allow the buyer to handle him freely; in the presence of his owner, he should be looked upon with suspicion.

Unclean dogs are very undesirable. Few dealers will guarantee that a dog is house broken. It can, of course, never be expected of puppies. Dogs that are confined to a cage offer excellent evidence of their cleanliness. A naturally clean dog will refrain from using the cage as long as possible, and will thereafter carefully avoid it, but a filthy dog will promptly proceed to smear his cage as much as possible. A healthy dog that conducts himself in this way can never be trained to cleanly habits about the house.

Sex.—Male dogs are usually preferred. Females are troublesome during their period of season. This inconvenience can be remedied by submitting the dog to an operation. An unsexed female is in many ways superior to a male as a pet, and is more desirable with children.

CHAPTER VIII

THE CAT

ITS CARE

Housing .- Cats are usually allowed the unlimited freedom of the house and because of their natural desire to climb are often found perched on some high and narrow ledge. There are certain conditions which must to some extent limit their range of movements. They must never be allowed in the room when meals are being served nor should they be left alone in the kitchen when food is within easy reach on the table, for cats are at heart born thieves-necessary to their existence in the natural state-and no matter how highly bred or well-mannered they may be, they are apt to fall into bad habits if the temptation is too great. Since cats are generally believed to be carriers of disease they should be forbidden from the sick room and nursery. While it has not been our experience that cats are dangerous around babies, many mothers, nurses, and some doctors think that the cat through jealousy will seek to kill the newborn infant. This is hard for cat lovers to believe and is likely to be ridiculed by them, bat there are cases on record where cats have apparently gone into the crib and curled up to sleep, and by getting too close to the baby's face have smothered it. While I believe this

to be accident rather than design on the part of the cat, still it is well to avoid the possible danger. When the windows are open in summer, cats are prone to go out on the window ledge to enjoy the sunshine and fresh air, and frequently when they venture too far they slip and fall to the ground.

Long-haired cats are bound to prove troublesome if allowed to use the chairs or other furniture at will, because of the great tendency of their coats to fall out. This may be avoided by supplying for their use a pillow or by covering some of the chairs with cotton pads which can be easily removed when a person wishes to use a chair. Except for this reason they do not need a special bed, but if it is desirable a box or basket may be provided for their use.

A pan of sawdust, sand, or torn bits of paper should be kept in some convenient place for their use in attending to their functions. They must have free access to this if they are to be clean with their habits. Ordinarily it is sufficient to clean the pan once a day, but there are cats who are so scrupulously clean that they will hesitate long before using the pan for a second time, and in such cases it is well to encourage the habit.

Exercise.—Since cats do not require the exercise that dogs do, the freedom of the house is usually sufficient for their needs and they are rarely taken out of doors. Where a yard is available it is often well to allow the cat to go out, but in the crowded city there is great danger of their contracting dis-

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ease from the alley cats. The tendency of cats to climb often results in fractures or other injuries, while fights with other cats or with dogs account for a variety of wounds.

Vital Functions.—Keeping a check on the functions is of even more importance in the cat than in the dog. Being more closely confined there is a greater natural tendency toward constipation and in males there is a frequent stoppage of urination from calculi. Since cats when sick hide away and brood, rather than show any outward manifestation of illness, trouble is not so quickly detected, and if the condition of the functions is known, sickness will be anticipated much more quickly. In Persian cats the hair about the rectum becomes easily attached to the stool, which, as it becomes matted and dry, prevents further passages until it has been cleaned away.

Since the cat subsists largely on a meat diet, the feces are not very copious and there is rarely more than one movement a day. The stool when normal is black in color, cylindrical in shape and firm and moist in consistency. Very dry stools are abnormal, as well as very loose or watery passages. Diarrhea stools may be either yellow or black in color, and may be tinged with blood. Mucus may, at times, be present in the movements. Passages of urine may occur one or more times a day. They are usually abundant in quantity and of a strong characteristic odor.

The cat should not be allowed to go more than forty-eight hours without a movement of the bowels, nor twenty-four hours without a passage of urine. In male cats, straining attempts at urination without results are sufficient indication of trouble to require immediate attention.

Coat.—The coat of the cat should receive daily combing and brushing. This is of especial importance in those of the long-haired variety, since their hair so readily snarls and mats. Should this happen, the mat must be removed, either by teasing it away bit by bit from the underlying hair, or by clipping it off. Bathing is rarely, if ever necessary and since cats so strongly object to water it is best avoided. Should it be attempted the cat must be thoroughly dried afterward to prevent its catching cold.

Teeth, Nails, Etc.—The teeth of the cat do not cause much trouble. They seldom become covered with tartar and so do not quickly decay. Cats rarely suffer from discharging eyes nor are they frequently subject to injury. The ears of the cat are often affected with canker and so it is necessary to clean them occasionally with a dry cotton swab. The cat's nails are exceedingly sharp and it is sometimes advisable to cut away or file the very sharp points. This operation, however, deprives the animal of a very effective weapon. Shedding of the nails is promoted by scratching on the carpets, chair legs, doorposts, etc. Occasionally the cat is sup-

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plied with extra toes which do not come into bearing on the floor. These nails are not subject to wear and if allowed to grow may penetrate the footpad and cause a very painful sore. They should be occasionally clipped or filed to prevent such an occurrence.

MEDICAL CARE

Medication.—Cats do not take kindly to medicines, nor do they withstand much handling, thus medical treatment is very limited. There are many medicines for which they have no tolerance. These include disinfectants, especially those of the coaltar group. They are particularly susceptible to carbolic acid. Disinfectants must not be used on the cat, for on anything with which the animal will come in contact.

Sick cats prefer quiet and darkness, and seek to hide away. Therefore, they should be handled as little as possible. Never should they be placed in strange quarters when it is in any way possible to care for them at home. The very change of surroundings in many cases will be sufficient to cause death to the animal. Cats succumb very quickly to disease, and so it is essential that treatment should be given early in the course of the illness if the outcome is to be favorable.

Administration of Medicines.—There are times when it is necessary to give medicines to the cat, and the most satisfactory manner is by the oral

administration of tablets. The cat can be held on a table by the forelegs, in the same manner as described for the dog; he can be held by grasping the forelegs with one hand and the hind legs with the other, or better, he can be rolled in a Turkish towel, with only the head projecting out. The upper jaw is grasped by the operator from above with the thumb and the forefinger of the left hand. and the tablet carried back into the mouth with a spoon. Liquids may be given in the same manner. Some cats do not seriously object to taking liquid medicines, while with others it is well-nigh impossible to administer them. Unless they take them readily, it is better when possible to resort to tablets. Suppositories may be easily used in the rectum, but enemas are hard to give and of uncertain action. When giving suppositories it may be more easily done if the cat is rolled in a towel. Cats will not tolerate inhalations. Because of their small size vaginal douches are impractical. Skin diseases are treated in much the same manner as in dogs, but the applications must be mild and nontoxic. Ointments are applied sparingly and over small areas.

COMMON DISEASES OF THE CAT

Digestive Disturbances — The Mouth. — Bones frequently become lodged around the teeth or in the throat. Needles and pins are often found pierc-

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ing the mucous membranes. Thread is sometimes swallowed and often becomes caught around the tongue, preventing its passage from the digestive tract. When the needle is attached it usually becomes lodged in the cheek or the roof of the mouth. The presence of these foreign bodies as well as decaying or coated teeth cause an inflammation of the mucous membranes.

Symptoms.—A thick viscid substance which may be white or brownish red in color drools from the corners of the mouth. The animal refuses food but may attempt to drink milk or water. There is great depression and if the condition lasts for several days the animal rapidly loses flesh.

Treatment.—Removal of the foreign body, tartar, or loose teeth, followed by swabbing the mouth cavity with a warm solution of boric acid.

Vomiting.—This occurs as a symptom of a disorder of the stomach. It may be the result of a slight upset due to indigestion or worms, or following the ingestion of some irritating material such as hair, or if it persists and becomes violent it is an indication of a severe inflammation of the stomach. The vomit may consist of the offending material, it may be a white froth, or it may be yellow, as a result of the involvement of the liver. In severe cases it may be streaked with blood or be reddish-brown in color. Constipation usually occurs with vomiting, and, in fact, may be considered as a contributing cause to it. The appetite

in mild attacks may remain good, but the ingestion of food at this time will only tend to make the condition worse. In severe attacks the animal will refuse all food but will drink a great deal of water. In the later stages it will sit over the water dish as though it wanted to drink, but could not.

Treatment.—Withhold all food and drink in order to give the stomach a much needed rest. The bowels may be emptied by the use of a glycerine suppository in the rectum or by giving a cathartic tablet containing two or three grains of cascara sagrada per mouth, or milk of magnesia may be given in teaspoonful doses every three or four hours. With this may be given five grains of subnitrate of bismuth. Should the vomiting continue for more than twenty-four hours it should receive more vigorous attention.

Constipation.—This may occur in animals fed on nothing but raw beef because the meat is so thoroughly digested that there is not sufficient residue to make a copious stool. However, the usual causes are improper food, foreign bodies, and poor digestion.

Symptoms.—Aside from the absence of a passage the cat may act languid, refuse food, and later start to vomit.

Treatment.—The movements of the animal should be noted each day in order to keep a check on their occurrence as well as their consistency. Should they become hard, oil should be given, either

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on the food or with a spoon. For this purpose olive oil or mineral oil works nicely. When it is observed that the cat has not had a movement for a period of twenty-four hours, oil should be administered during the next day, a teaspoonful, once, twice or even three times, should no movement occur from less. Should the bowels fail to move during the second day, a suppository may be used. If this does not bring forth a movement, or should the cat start to vomit, the veterinarian should be immediately called.

Diarrhea .- This may be due to improper food or it may be a symptom of an inflammation of the bowels due to cold, infection, or worms. Milk often disagrees with the cat, causing a violent diarrhea after each feeding. Some cats cannot take milk in any form, while others may take raw milk with impunity and develop diarrhea from evaporated or condensed milk. In other animals the reverse may be true. When it is thought that milk may be the cause it should be discontinued. If the diarrhea stops, another form of milk may be given in order to see if there may be any that is agreeable to the cat in question. If all forms of milk tend to cause a similar upset, it should be entirely eliminated from the diet. Diarrhea due to a cold will usually be accompanied with a fever and probably a watery discharge from the eyes or nose, or both. There is an infectious disease, occurring in cats characterized by vomiting and diarrhea, which

is very fatal and very contagious. Worms may in some cases, be the cause of diarrhea. Diarrhea stools are usually black, but if the liver is involved they are yellow in color. In number the stools may range from one to twenty a day, and in quantity from a few drops to two tablespoonfuls.

Treatment.—All food and drink should be withheld. If possible, a teaspoonful of castor oil should be given, or several doses of milk of magnesia may be indicated. After the subsequent cleansing of the bowels, if the diarrhea does not stop, subnitrate of bismuth should be given in five-grain doses, every two to four hours. The diarrhea' should not be allowed to persist for any length of time.

Hair Balls .- While hair balls may occur in any cat, they are more frequently found in those of the long-haired variety. In the process of cleaning their coats the loose hairs are picked up by the tongue and swallowed. If but a few hairs are taken at a time they pass on into the intestines, become mixed with the food and are passed out with the stool. When large numbers of hairs are swallowed they tend to fasten themselves together in the form of a ball. This may happen either in the stomach or in the intestines. Thus, the hair ball may be thrown up after it has become of considerable size, or it may be passed as a stool. When the accumulation is great, it may form an obstruction in the intestine which is followed by an infiammation of the bowels. Hair may remain in the stomach for

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-years without causing any appreciable trouble. ,One hair ball was removed from the stomach of a cat after death, which was as large as the ordinary baseball.

Symptoms.—There is no regular trend of symptoms exhibited by hair balls. There may be evidence first of irritation of the stomach as indicated by repeated attacks of vomiting—the vomit consisting only of white froth. In other cases there will be evidence of constipation, which in a few days will be followed by vomiting. The appetite will, of course, be impaired, and the cat will show depression. Many cats habitually throw up a hair ball at regular intervals.

Treatment.—A teaspoonful of castor oil will often cause vomiting of the hair ball from the stomach. If on the other hand, it is located in the intestines it may cause its passage. However, for this effect, mineral oil in repeated doses is much to be preferred. These cases should not be neglected as serious results may follow.

Worms.—Young cats are occasionally infested with round worms, while tapeworm is rare. As a rule the first evidence of trouble will be noticed when the animal suddenly throws up a worm. Since cats are very susceptible to any of the poisons active enough to disturb the worms, their administration should be carried out only by a veterinarian.

Diseases of the Urinary Organs.-While inflammation of the kidneys may occasionally develop in

cats its diagnosis is very difficult. The most frequent urinary trouble occurs in male cats, due to the presence of calculi in the urethra. The very small stones are formed in the bladder in large numbers, and are forced down into the urethra as the cat urinates. Because of the very small caliber of this canal the stones become imbedded in it and their removal is very difficult. When the stones are of sufficient size to obstruct the canal urination is impossible. As the cat strains in the attempt the stone becomes more firmly imbedded. The disease may be diagnosed by observing these attempts at urination, and in their event the animal must be rushed to the veterinarian with all possible haste. Even then the outlook is not very good for if the offending stone is removed it will only be a matter of time when more will pass down into the urethra and cause further trouble.

Diseases of the Skin—*Eczema*.—The cat suffers much from falling of the coat, danáruff, and eczema. The conditions are very closely allied and are primarily due to disorders in digestion brought about by faulty feeding. In young cats, worms are frequently a contributing cause. Confinement and lack of exercise also play an inportant part.

Symptoms.—Eczema starts with a falling of the coat and scratching. As it progresses there may be evidence of dandruff. But when it becomes severe, skin lesions are noticed. Pimples may form in various places over the body especially just anterior

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to the base of the tail. There may be areas of dry, rough scales, or the lesion may consist of a reddened moist patch, devoid of hair. As the disease advances the lesions increase in size and spread to other parts of the body.

Treatment.—If the diet is bad it should be corrected. If the cat is fat, he should be put on short rations. If worms are present, they should be treated. Unless the lesion is of very long standing it will probably respond to careful applications of borated vaseline, which should be applied sparingly, and well rubbed in, so that the cat will not in cleaning himself lick up too much of it. If the condition persists for any length of time internal medication and more vigorous external treatment will be needed.

Mange.—Mange first appears about the head and ears and gradually spreads back over the body. The lesion consists of a very thick crust of scales of grayish-brown color which gives the skin the appearance of being very much thickened. If the disease involves a large part of the skin area it is questionable whether or not it is advisable to attempt treatment. In the early stages and in mild cases sulphur and lard may be applied. However, it is much better to consult a veterinarian while there is still a chance of saving the animal.

Fleas.—During the summer months cats suffer greatly from fleas. Because of their susceptibility to drugs great care must be exercised in the selec-

tion of the treatment. Persian insect powder is one of the safest remedies. The cat is placed on a newspaper or sheet and the powder is sprinkled over the body and worked well into the hair with the hands, about twenty minutes being spent in the process. By this time the fleas will begin to migrate toward the head and as they come to the surface they may be picked off and dropped in a strong disinfectant solution. Those which drop off upon the paper may be disposed of in the same manner. After all the fleas possible have been removed the cat should be given a good brushing to remove most of the powder. This treatment must be repeated frequently as long as any fleas remain.

If it is possible to bathe the cat a solution composed of one tablespoonful of kerosene and a pint of milk can be rubbed into the fur, and after an interval of half an hour the animal must be bathed. About two or three treatments, at intervals of three days, will be necessary to free the cat of her pests.

Black Flag should never be used. Coal-tar disinfectants are also too toxic to use around cats.

Organs of Reproduction—*Estrum.*—The period of estrum in a cat occurs at more or less irregular intervals of two to four months. In regular breeding animals the period is usually found constant to each individual. The discharge is spare in quantity and thus is rarely observed, but the nervous excitement attendant to the function is such that there will be no doubt in the mind of the owner as to its

The Cat

cause. The cat cries a great deal, in a peculiar tone, and thus breeders have come to name the function "calling." In addition to this the animal will roll about on the floor, on cushions, and become particularly excited if given catnip. They are very lovable and seek much attention and petting.

During this period if kittens are not desired the cat should be kept under strict surveillance.

Cystic Ovaries.—In female cats, especially those that are finely bred, the ovaries frequently become diseased. This may consist of a simple inflammation, or a cyst may be formed. The effect of this condition is to increase the frequency and severity of the period of season. The calling becomes very loud, constant, and annoying, and the excitement to touch is very much increased. The only treatment is operative.

Castration.—Female cats are made much more desirable as pets if they are altered. This is a more or less serious operation, but when carried out with strict adherence to good clean surgery by a skillful operator much of the danger is eliminated. The proper age at which the operation may be performed is from nine months to one year.

Castration of nucles is ordinarily considered a simple operation. In city bred animals of low resistance trouble sometimes follows, and so the operation should be performed as early as possible to minimize the danger.

FEEDING

Foods.—Of the meats, raw beef is the most preferable food for cats. This should make up the major part of the diet. Boiled and roast beef, lamb, or veal may also be used in limited quantities. Raw liver is also very good, and because of its laxative action is often desirable. Boiled or fried liver, however, should never be given.

Cereals may be given to the cats that like them, in limited quantities. Farina, Cream of Wheat, and oatmeal, covered with milk, will help to give body to the diet. Some vegetables, such as spinach, string beans, and carrots, may also be given. There are on the market cat foods which are by many highly recommended. Bread may often be given when moistened with milk.

Milk may be given freely, provided the cat does not show a weakness to it. Should it cause diarrhea, its use must be discontinued. Cate can have free access to water at all times, but as a rule they do not care much for it.

Feeding.—The cat should be fed at least twice a day. The quantity of food allowed must depend on the age and general condition of the animal. Growing cats will require more in proportion to their size than those already matured. A fully developed animal in good condition will require only enough food to maintain an even weight. The food should be given at regular intervals and in regular amounts.

The Cat

The cat should not be allowed to gorge itself at one meal, and then go for one or two feedings with only a small quantity.

When weaning kittens it is perhaps advisable first to accustom them to taking milk from a saucer. Cereal may then be added in small quantities, and by increasing the amount they will learn to eat some of the bulky foods which give body to the diet. When they are readily taking the cereal they may then be given meat in small quantities.

I ne cat should not be anowed to gorge itself at one meal, and then go for one or two feedings with only a small quantity.

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