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PET BOOK

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THE SCOTCH COLLIE.

A Good Companion, a Faithful Friend, a Hard Worker.

BIGGLE PET BOOK

A COLLECTION OF INFORMATION
FOR OLD AND YOUNG
WHOSE NATURAL INSTINCTS TEACH
THEM TO BE KIND TO ALL
LIVING CREATURES

BY

JACOB BIGGLE

ILLUSTRATED

*"The world's not seen him yet
Who does not love a pet."*

PHILADELPHIA
WILMER ATKINSON CO.

1900

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DOESN'T THIS LOOK INTERESTING

ANGORA KITTENS.
Haven't they bright faces?

PREFACE.

Although getting to be an elderly man, one who likes a comfortable rocker, is fond of a hammock and an after-dinner nap, with various other signs of advancing years, yet my fondness for the dumb friends about me, from my favorite horse down to the little wren sitting at her door just above me, is as deep now as it ever was. In this love for the lower animals, however, I am only second to my good wife Harriet, whose constant thought and effort is to make every living creature as happy and contented as it can be.

For the horses and dogs she has had watering troughs set up along the two roads which skirt Elmwood; in the winter she throws out seeds and crumbs for the partridges, meadow larks and now and then a stray robin. The English sparrow comes too, and I must say, confidentially, that my love for the birds is strained a little when it comes to the sparrows. Harriet has a regular hospital for suffering and homeless cats, for lame and friendless dogs, for birds with broken legs and wings,—every creature in need of a friend finds it in her.

Elmwood is full of pets. In addition to those which belong more particularly to us, Tim and his

energetic wife Martha have always had dogs, cats, birds and other animal friends. Since their children have commenced to grow up many other pets have been added to the list. I have drawn largely upon their experience and have called to my aid much information in regard to children's pets derived from their observation and reading.

Every boy or girl should have a pet of some kind ; that is, provided he or she will take care of it, watch it, look after its wants, keep it clean, and if it is one of the intelligent animals, train it. No boy's life is quite rounded out if he has not had the companionship of a gentlemanly, intelligent, honest dog. In shaping the character or life of some interesting pet, the character of the young person is formed as well.

But I cannot condemn too vigorously the practice of giving pets of any description to young people whose cruelty, thoughtlessness or neglect will cause them suffering and frequently death. Few children are naturally cruel ; most children are naturally careless. Don't give young people pets until they are old enough to care for them properly, and if they lose interest in them and neglect them, give the pet away to some other young person whose desire for a pet is so great that he will appreciate it and look out for its wants and comforts.

Elmwood, 1900.

CHAPTER I.

DOGS.

You can tell what the people of a house are like by the behavior of their dogs.—Tim.

A very young person is not, as a rule, a good one to have charge of a dog; that is, for the dog's sake, but I know of no company that will have a better influence on a boy; on this account I place a well-bred dog at the head of the list of desirable pets. To keep a dog healthy and happy it should have plenty of outdoor exercise, and this the average boy is ready and willing to give him. I always pity a big dog confined in some little backyard or perhaps chained with a four-foot chain and with no chance for running or recreation. No wonder such a dog is always cross.

A puppy intended for a house dog should early be trained to attend to his wants out of doors. The way to do it is to give him frequent opportunities and then to chide him and make him ashamed every time he forgets himself in the house, and immediately put him out of doors. Do not yell at him or chase him, as this is apt to make him nervous and lose control of himself, but scold him quietly, and then when he has gone out and done as you wish, praise him. A dog will not knowingly soil his own bed, but will hunt around for some suitable place. If he has been in the house

awhile and seems to be uneasy and be smelling around, put him out at once. Train him to "speak" by barking once when he wants to be let out, also when he wants to come in. Don't let him form the habit of scratching the doors.

The greatest comfort in the ownership of a dog is to have one that will mind intelligently and quickly. This part of his education must be begun early in his life. After he has learned to come to you when called,

KESWICK MIKE.
Irish terrier, six
months old.

to follow you when ordered to do so, and to lie down and stay there when you tell him, he has mastered the three "R's" of his education, and after that you can do almost anything with him.

Be firm but kind with your dog and have abundance of patience. Never give a command you cannot

enforce. Be consistent, don't let him do one thing one day and the next punish him for it. The first time a dog commits a fault is the time to correct him. Don't let him form a bad habit, such as running out in the road and barking at passers-by, or howling at night to the disturbance of everybody, and then expect to stop him at once. It will take ten times the effort then.

If it is necessary to punish him, two or three sharp taps with a little switch, or better yet a rolled-up newspaper, over his back at the time the fault is committed will probably be all that is necessary. Never strike a dog on the head, and, I hardly think it necessary to say, never kick a dog. Do not punish a

dog some time after the fault has been committed, but right at the time, otherwise he will not know what you mean. Never break the spirit of a dog. As a dog gets older you will find that a scolding will answer every purpose. He will be so anxious to please that he will feel very bad when scolded. I used to have a dog that was punished by being put in a dark closet, and it was all that was necessary. Whenever your dog has done something that deserves praise, do not stint him.

A dog that has acquired the habit of killing chickens can often be cured by catching him and tying the dead chicken around his neck where he cannot scratch it off or reach it. Keep it there for an hour or two and keep him away from your presence; he will get so tired of the chicken that he will never again want to see the sight of one. I know of no cure to suggest for dogs that will kill sheep, except that such dogs should not be allowed to run at large. A dog by itself

BLOODHOUND.

is not apt to kill sheep, but at night when they meet other dogs they are apt to lose their heads, return to their savage instincts when dogs hunted together in packs, and do damage to the flock. For a dog that will persistently kill sheep there is only one cure, that is to make way with him. These are usually dogs that have never been rightly trained or disciplined, but sometimes a well-bred dog will fall into bad company and get into trouble, just as the human family does.

Most owners overfeed their dogs, particularly with meat. A puppy that has just left its mother

should be fed four times a day until it is six months old, then three times a day until it is full grown. Do not give him cake or anything sweet or greasy. Twice a day is often enough to feed a grown dog, and some feed but once a day; in that case, the best time to do it is in the evening. My plan is to give a light breakfast, and the principal meal at night. Dogs that have but one meal are apt to bolt their food and suffer from indigestion. Let him have a special dish of his own and keep it clean. Give him all that he will eat, but no more, as what he leaves is apt to lie around and become spoiled.

WOLF HOUND.

There is no better food for dogs that have free range than the scraps which come from the family table, as they contain a variety of food both good and wholesome. He should not have too much potato and small bones that are inclined to splinter, such as chicken and mutton bones. The dog will chew up the latter and eat them, often causing trouble. When food is to be specially prepared for dogs, cooked meat chopped fine with a quantity of vegetables added, bran meal and rice made into a biscuit or pudding will be found a good combination. Fried cornmeal mush in winter may be occasionally fed. Once or twice a week give the dog a big bone from which most of the meat has been scraped. It will be good for the teeth and jaws, and will amuse him as well. Dog biscuits are good for special occasions, but not for steady diet.

Long-haired dogs should be washed as often as

once a month in winter, and once a week in summer. Smooth-coated dogs keep cleaner, and in the country, where there is grass and water, do not need so much attention. Have the water slightly warm; use some good dog soap, rubbing it thoroughly into the hair until it gets to the skin, and until the dog is covered with the lather. Don't get it in his eyes or far into his ears. Let this lather stay on for five minutes or so, then rinse off with cooler water two or three times, and rub him dry with a coarse towel or a clean grain bag.

My preference has always been to keep our dog confined at nights. This keeps him out of mischief and I know where he is, and he cannot be suspected when sheep are killed or other damage done. If he is kept outside as a watch-dog I chain him up to his kennel.

A GROUP OF FOXHOUNDS.

If you have a dog that ought to be a water dog, never throw him into the water to teach him. It will scare him and very often spoil his future as a water dog. All dogs can swim and many will learn to like it if they are not frightened at first. A good way to begin is to wade through a shallow creek and call your dog to follow you. He may hesitate at first, but his desire to keep up with you will soon induce him to splash through.

As a rule a dog will not attack a person or other dog when off his own ground. When you approach

a house where they keep a dog, do not behave as if afraid of him. Go on quietly and confidently, and as if you belonged there. If the dog growls or barks pay no attention to him, but proceed without noticing him. Let him smell you all he wants. If he seems determined to stop you then, you had better stop and wait until some one of the family rescues you.

It is always best to speak kindly to a strange dog, particularly if he looks a little cross, but don't try patting him unless he makes the first friendly move. I have usually found it a good plan not to be afraid of a dog that jumps and runs towards you, and I have seldom had any trouble. If you show you are afraid

ENGLISH GREYHOUND.

the dog is smart enough to see it at once, and then if you should start to run away he thinks, of course, that it is his duty to catch and hold you. The dog that barks a lot is seldom to be feared. A friend of mine told me of this plan of defense when attacked by a cross dog. Hold out your hat towards him, and as he flies at you he will seize hold of the brim, then if you give him a good sharp kick on his jaw from underneath, it is very apt to sicken him and he will leave you alone. I have never tried this: it looks as though it might work, but dogs are like men, and among them molasses will catch more flies than vinegar.

A stranger should never interfere with a dog when he is eating. His instinct teaches him to protect his food. A dog with a bone knows no friends. Some dogs are naturally fighters, but try to keep them from

it. If your dog is not too big, when he gets in a quarrel pull him out by his tail or leg and tuck him under your arm. It will do no good to strike him or cuff him, for he thinks it is the other dog hurting him and it will only enrage him the more.

BARKS.

Never chain up a dog if it is possible to avoid it.

Never tease a dog and don't let any one else tease yours.

Don't let any dog try to follow you when you are riding a bicycle.

Good, clean straw makes excellent bedding,—but keep it clean by frequent changing.

It is said if a dog is fed onions and turnips pretty regularly, he will not be troubled with worms.

A fat, overfed dog is dull and stupid. A fresh, vigorous appetite is a great sharpener of a dog's wits.

But one person, so far as possible, should have the care and training of a dog. It is hard, even for a dog, to serve two masters.

After all, the difference between a useful, valuable dog is not so much a matter of breed as it is care and training, especially when the dog is young.

An old piece of carpet or bagging is the best thing for a dog to lie on nine months of the year. Straw, hay or shavings make a harbor for fleas. If you use hay or straw see that it is changed frequently and that it is always dry. This is very important.

PUG DOG.

Don't let a little dog or a young dog follow the carriage ; the overexertion may injure him. Either make him ride or else stay at home. Following a carriage is one of the best forms of exercise for hunting and running dogs. Teach them also to sit still while riding in the carriage or wagon.

Young dogs of the big breeds are apt to form the bad habit of jumping up against a person, thereby terrifying timid people and soiling one's clothes. To break them of this habit, when they jump up hold them by their front paws and step on their back toes, not hard enough to injure them, but hard enough to hurt.

Puppies should have lots of exercise. When they are not sleeping or eating they should always be running about. In cold or wet weather they should have a clean, roomy place under cover to run about in, with a large, green bone to pick or a block of wood or ball or some other amusement. It is as natural for a puppy to play as it is for a child.

AN ARMLOAD OF PUPPIES.

CHAPTER II.

VARIETIES OF DOGS.

The more I see of men the better I like dogs.—Tim.

TO-DAY'S
FAVORITE,
BOSTON TERRIER.

There are some fifty or more recognized varieties of dogs bred in this country. A few of them are "all around" dogs whose faculties fit them for the varied and active life of a country home, but many of the varieties have been so developed for special purposes that they would be unhappy and out of place on a farm.

It has not seemed worth while in this little work to devote much space to those varieties unadapted to an active, useful life.

Some of the TERRIERS are more ornamental than useful. In Europe they have been used to hunt small game, rabbits, foxes, weasels, etc., as well as for exterminating rats. In this country they are mainly kept as pets or to kill rats and mice. They generally have plenty of persistency, vim and grit and will attack the largest foe. They have good noses and when trained are nearly equal to a hound in the sharpness of their scent.

Of the FOX TERRIER there are two varieties—the smooth-coated and the wire-haired. They are cleanly in their habits, affectionate and very plucky, it being

one of their faults to quarrel with other and often larger dogs. As ratters they have few equals, and they are death on cats. They are suspicious of strangers and not inclined to be overfriendly with them, and for inside the house make admirable watch-dogs. Unfortunately they have been so closely bred that many are nervous and seem to live at too high a pressure. At a recent dog show I attended, the Fox Terriers made ten times more racket than all the other dogs put together. Fox Terriers should be white in color with black-and-tan markings, particularly around the head. They should weigh from twelve to eighteen pounds. The Fox Terrier's tail is usually cut off, when a week or so old, about four or five inches from the body. Right here I would like to put in my protest against the cruel cropping or docking of dogs of any variety. The practice is as unnecessary as it is painful.

FOX TERRIER.

The BULL TERRIER is a cross between a Bulldog and a Terrier. They are hardy, docile and affectionate,

A BULL TERRIER FAMILY.

make good house dogs and ratters, and, considering their ancestry, they are not particularly quarrelsome. I never thought Bull Terriers very handsome dogs, and I have known some that seemed "sneaky." Bull Terriers are divided into families, the Boston Terrier with its shortened nose and full eye now being one of the most popular. Fashion has decided that Bull Ter-

riers have their ears clipped so that they stand erect, but their tails are not cut.

The IRISH TERRIER is a good dog for the farm. He is intelligent, a good ratter, and better tempered than the Fox Terrier. He will not seek a quarrel, but will not go three steps around to avoid one. He has a hardy constitution, makes a good watch-dog and will stand any amount of hard work. The hair is hard and wiry and about two inches long. The tail is generally shortened to four or five inches. The color should be solid, either red, yellow or gray, and the weight from sixteen to twenty-four pounds. See illustration, p. 10.

The AIRDALE TERRIER has a good name in England as a useful dog, but he is little known here. They have rough, shaggy coats, and weigh as much as sixty pounds. Other varieties of Terriers less popular, less common or less useful than those I have named are the Yorkshire, Skye, Scotch, White English, Welsh, Black and Tan, Bedlington, Dandie Dinmot and Maltese Terriers. Scottish Terriers are shown on page 33.

The SPANIELS form a numerous type and are one of the oldest breeds in existence. Their hair is long and silky, their eyes prominent and their ears long and pendant. They are, as a rule, intelligent and biddable. They are apt to be snappish towards strangers, but are fond of being noticed and petted. Spaniels may roughly be divided into two groups—the toy dogs or ladies' lap dogs and the

COCKER SPANIEL. larger, active hunting or fried Spaniels. In the first are included the Japanese, King Charles, Prince Charles, Blenheim and Ruby Spaniels.

The COCKER is perhaps the best known of the larger and more useful class. He is a light, active, general purpose dog, inclining, however, to put on fat as he grows older. The coat is thick, curly and wavy, and the color a solid liver, red, lemon and black and combinations of any one of these colors with white. The Cocker's tail is usually docked. The ears are long, reaching almost to the ground.

The FIELD or SPRINGER SPANIEL is a larger dog than the Cocker and is jet black in color. The former weighs over twenty-eight pounds and the latter from fifteen to twenty.

CLUMBER, SUSSEX and IRISH WATER SPANIELS are all much larger than the Cocker. All these

A NEST OF CLUMBER SPANIELS.

Spaniels are useful for hunting purposes. Their scent is excellent; they raise the game for the hunter's gun and retrieve game which may have

fallen into the water. Their long thick coats are well adapted to resist cold and wet.

The CHESAPEAKE BAY dog is a local variety of water dog that has been bred by the duck hunters of that section and is about the only truly American dog. He weighs from sixty to seventy pounds and is generally of a dark red brown color with a curly coat impervious to water.

The PUG dog seems to be adapted for no particularly useful end. It is simply a lady's lap dog. It

has the advantage of being cleanly and odorless, but with many disadvantages as it grows old. It is particularly adapted to city life.

The POMERANIAN or SPITZ is now bred also in smaller or toy varieties in either black or white. They have bad tempers and should not be tolerated where there are children. They are, however, sharp, quick watch-dogs for inside the house.

The DALMATIAN or COACH dog has short hair and is white with black or liver-colored spots the size of a quarter dollar closely spotted all over him. His ruling passion is the companionship of horses. He is a good-sized, muscular dog, capable of enduring fatigue and running with the team. Well-bred dogs should have spots in their tails as well as on their bodies.

The FRENCH POODLE or BARBET is said to be the most intelligent of dogs, and this seems to be borne out by the fact that in dog shows the majority of the performers are apt to be Poodles. In Germany they are used as water dogs. They have plenty of courage and are good watch-dogs, and they rarely attack or bite mankind. Poodles are usually white, brown or black, the latter being the popular color. See illustration, page 46.

The BULLDOG has many admirers, although he is not a friend of mine. The best that can be said is that they seem to be affectionate to those they know. They were originally bred, years ago, for bull-baiting, hence their name. They will run at a cow or a bull, catch it by the nose and hold on to it until they are choked so that they will let go.

ISN'T HE
PRETTY?

It is the fashion to breed them so that they will be as ugly as possible, with short noses and protruding teeth and with the skin on their jaws lying in heavy wrinkles, the lower jaw projecting beyond the upper. Like prize fighters, their brains are not proportionate to their strength. They are ungainly in gait and have the characteristic of never letting go once they get hold.

CHAPTER III.

VARIETIES OF DOGS—*Continued.*

After all, the difference in dogs is more one of care and training than it is of breed. No animal is more influenced by his surroundings.—Tim.

Almost all the Hound family have been trained for generations for hunting purposes, and in some of them their scent has been highly developed, and in others keenness of sight and fleetness of limb are the main characteristics. They ought not to be confined in small places, but should have plenty of exercise.

The ITALIAN GREYHOUNDS are mainly ladies' pets, or bred for fancy purposes, with delicate constitutions. Closely allied to them in shape and size is the Whippet, or Running dog. This, however, is not a distinct breed, but said to be a cross of the Bull Terrier and the Black-and-Tan Terrier with the Italian Greyhound. Whippets are used for running races, as they are fleet of foot and have good staying qualities.

The ENGLISH GREYHOUND is a large dog with a deep chest, thin but powerful loins, and very long legs. They hunt by sight and can catch a rabbit running with ease. They can go as fast as an ordinary horse without trouble, but they would be out of place and unsuited to life on the average farm. See page 14.

DEERHOUNDS and STAGHOUNDS are large dogs,

standing about thirty-one inches at the shoulder, and somewhat like the Greyhound in shape. The Deerhound is covered with a coat of rough, wiry hair. He is popular in Scotland and in the West for running down deer. The Staghound is a smooth-coated dog and but little known in this country.

DEERHOUND.

RUSSIAN WOLFHOUNDS are big dogs, closely resembling the deerhound. See page 12.

The ENGLISH BLOODHOUND is a dog from twenty-six to thirty inches high, with a wonderfully keen scent. He is black and tan or tan color only.

There are few pure-bred Bloodhounds in this country, those so called being a cross of the dogs formerly used in the Southern States for tracking runaway slaves. The English Bloodhound is not a vicious dog; if tracking a man and overtaking him, no harm would come to the man if he would stop running. The Bloodhound is perhaps the only dog that takes pleasure in tracking a stranger; most every dog will enjoy tracking his own master. See illustration, page 11.

In England, the FOXHOUND has been bred for generations, and in this country it has been introduced in many sections for hunting in packs. It is intelligent and makes a good dog on the farm. The American Foxhound differs—is smaller and faster than the English. It is able to run as fast as the best race-horse. It has a short, dense and glossy coat, and is almost any broken color, black, tan and white being the most desirable. See illustrations, pages 13 and 47.

The BEAGLE HOUND is a smaller type of the Foxhound, but less throaty in proportion to its size and more delicate in its make-up. Its yelp or cry is the most musical of the hound family. The head is broad, tapering towards the nose, which is of medium length and inclined to be pointed. The ears are full and sharp. He is a quiet, peaceable chap, attending to his own affairs. He is a great rabbit dog, and as he gets old is fond of hunting on his own account. In height, according to the standard, they

YOUNG BEAGLE HOUNDS.

should not extend fifteen inches at the shoulder. They are especially useful in such parts of the country where there are not many places for a rabbit to "hole."

One of the most peculiar of dogs is the DACHSHUND. He will attract attention anywhere. The measurements of a good dog of this variety are, length from nose to tip of tail, forty-four inches; height at shoulder, ten and one-half inches; weight, twenty to twenty-two pounds. Smaller varieties weigh from ten to sixteen pounds and are built proportionately. In color, they are black and tans, chestnut and tans, and solid reds. The skin is looser on a Dachshund than on any other variety. The Dachshund is perhaps the least amenable to discipline of all the varieties.

ST. BERNARD dogs are among the largest of the race. There are two kinds—the short-haired, smooth-coated, and the long-haired type. The former is the variety bred at the Hospital of St. Bernard, on the Alps,

where these intelligent dogs are used to aid and rescue storm-lost travelers. At present the long-haired variety seems to be the most

ROUGH-COATED ST. BERNARD
AND BABY.

popular, but this is mainly a matter of choice. In color, St. Bernards are orange, tawny, red, and gray-brindled, with a mixture of white with any of these; but a white chest, feet, point of tail, and white around the

nose and collar are obligatory for show-dogs. The coat of the rough-haired is shaggy, but flat in texture. The smooth-haired has a coat like a hound. (See illustration, page 49.) St. Bernards are not apt to be vicious and savage; they are strong, massive, active and courageous. They delight in the company of children and are excellent guardians for them. They measure from twenty-eight to thirty-five inches in height at the shoulder and weigh from one hundred and twenty to two hundred pounds.

ENGLISH MASTIFFS have been bred for years as protectors, guardians and watch-dogs. They have been trained to go the rounds of buildings and grounds as regularly as a watchman. They are docile, and seem to

ENGLISH MASTIFFS.
Father and son.

have an instinctive knowledge of the difference between an honest man and a thief. Usually, just a look at a Mastiff is all that a tramp will need. They are patient

with children and seem to understand that they must make allowance for their rudeness. A Mastiff will usually give warning and threats before he considers it necessary to attack: but an aroused, angry Mastiff is a veritable demon. They are from twenty-five to thirty-one inches high and weigh from one hundred to one hundred and fifty pounds.

The GREAT DANE or GERMAN MASTIFF is one of the fiercest-looking dogs, with an alert, intelligent face and sharp-pointed ears, which are universally clipped when he is a puppy. They, or strains of the family, have been called Danish Mastiffs, Ulmers, Boarhounds, Russian Bloodhounds, Brewer's dogs, etc. As a rule, they have fairly good tempers and are among the best of watch-dogs, that having been their occupation for many generations. They are lighter in build than a mastiff and much heavier than a greyhound, but somewhat resemble a cross between the two. In color, they are brindled, solid color, or spotted. They weigh from one hundred to two hundred pounds.

The NEWFOUNDLAND is our largest water dog. One objection to the Newfoundland is his uncertain temper, but this may run only in families. While a good watch-dog and companion, it is in

the water that his semi-aquatic nature is seen to best advantage. No water is too cold or rough for him, and he takes instinctively to the work of saving any unfortunate who falls in. No dog is better pleased when he knows he is serving his

master. There are two types. The black, which is the common variety, is a curly-coated dog, black as coal. Then there is a variety with a splash of white on chest and toes and tip of tail. The average height at the shoulder is from twenty-five to twenty-seven inches, and the weight from one hundred to one hundred and fifty pounds.

The ENGLISH SETTER is a good watch-dog, but his training and in-

IRISH SETTER, ENGLISH SETTER,
AND POINTER AT WORK.

stinct have been developed to hunt, mainly for birds. His keen scent enables him to locate the game and indicate to his master by pausing — “pointing” — and thereby indicating just where it is. The coat of the Setter is a soft, silky hair, without curl. In

color, they are black, red, yellow, orange, brown, or combinations of these colors with white. See page 34.

The IRISH SETTER is a solid, deep, rich mahogany-red color, sometimes with a white spot on the breast, with some slight variations. It is similar in size and shape to the English Setter, but is perhaps more popular in this country. They are quick as lightning, but their pace never gets beyond their nose.

The GORDON SETTER is a handsome dog, more heavily built than the others. The color is a rich, glossy plum-black, with rich mahogany-tan markings,

and sometimes a spot of white on the breast. He is from twenty to twenty-five inches high at the shoulder and weighs about fifty pounds.

The POINTER is another hunting dog, and is especially valuable for work on prairies, where the dog must go a long time without water. The Pointer is said to be more easily trained than the Setter, but his temper is not so good and he is more apt to be snappish. He has an excellent nose. Pointers have short coats

POINTER.

and are different colors—liver and white, orange and white, being the most popular in the order named. They weigh about fifty-five or sixty pounds.

So-called "Coon" dog is not a distinctive breed, but is a rough-and-ready dog that can track a coon, tree him and then keep him there by barking until his master arrives and the coon is shot or the tree cut down, when it is the dog's duty to kill the coon. One of the best crosses for coon dogs is said to be that of bulldog with the foxhound.

The COLLIE or SHEPHERD dog and the ENGLISH SHEEP dog are treated in another chapter.

SMOOTH AND ROUGH-COATED COLLIES.

They seem to say, "What are you sheep doing down there, anyhow?"

CHAPTER IV.

THE BEST DOG FOR THE COUNTRY HOME.

Love me, love my dog.—Martha.

Don't keep too many dogs. One good one will be of more service than three ill-trained mongrels, and in the average country home, two at most—one for the house and another for the barn—should be the limit. Get a good dog. It costs no more to keep a well-bred, pure-blooded dog than it does some mongrel, "yaller" dog, and, aside from the pleasure of possessing a pure-blooded animal, there is always the possibility of profit from his or her progeny. Some writers have maintained that the common dog of no particular breeding is more intelligent than his blue-blooded cousin, but I do not think so. The different breeds differ much in intelligence, and dogs of the same breed will show a great difference in their ability to learn.

First, make up your mind for what purpose you want a dog, and then get a pup of the variety that generations of training and development have fitted for that purpose. Personally, I do not like large dogs. For one thing, they eat as much as a calf, and for another, they are apt to get cross and dangerous as they grow old. I heartily agree with a friend of mine who would not tax any dog under forty pounds, but

would impose a tax of ten cents a pound a year for every pound a dog weighs over forty pounds. Big dogs are a nuisance in the house. They spoil the carpets and furniture, and are generally in the way, and yet for a dog's best development he should live and be brought up in intimate relations with the family life.

Where, however, a good, big watch-dog is really needed, an English Mastiff, Great Dane, St. Bernard or Newfoundland will always have a deterrent effect on evildoers. The Mastiffs and Great Danes have been particularly bred as watch-dogs for generations. One look from the fierce face of the Dane will send a tramp skipping. The St. Bernard as a watch-dog is rather ornamental than useful, as the watching in-

GREAT DANE.

instinct has not been developed in him like in the two former breeds. Both the long-haired St. Bernard and the Newfoundland suffer with the heat of summer in this climate. But there is always the possibility of these big dogs really hurting or killing some one, so that, unless their watching services are really seriously needed, I much prefer some active, smaller variety. Burglars and evildoers often find ways to silence a big dog outside the house, whereas they cannot quiet a little dog inside that will make a big racket at the slightest suspicious noise. Then big dogs are sometimes utilized to run dog powers for churning, washing, and other purposes. Get them to like it and enjoy it if possible. The exercise will not hurt them a bit. It is

the fault of the Mastiff that he will not take enough exercise for his own good. A city friend of mine uses one of these powers simply to give his dogs exercise.

For the care of a poultry yard, the little Dachs-hund cannot be excelled. No skunks, minks, opossums, coons or weasels will remain long in the neighborhood. He will track them, dig them out, and kill them relentlessly. Owing to the peculiarly long and snake-like shape, he is able to follow them to their holes, and this he does fearlessly. He is an independent chap, however, and quarrelsome with other dogs.

For a dog for the barn or stable, the Dalmatian or Coach dog has had his fondness for horses developed by years of association with them. He will make a good watch-dog, and will take care of the wagon, and see that nothing is taken from it when delivering goods, etc. He is generally trained to run along between the front axle and the horse's heels, or right under the pole of a double team. Other dogs along the road hesitate to attack him in this position, nor will he leave it to fraternize with them. Under favorable circumstances he is playful and intelligent, but if ill-treated he becomes sullen and dangerous.

As ratters and vermin-killers, the Terriers have no equal. Quick on their feet, ever on the alert, keen-scented and sharp-eyed, they will clear the barn or granary of mice, and keep it so. The Fox and Irish

WHITE SCOTTISH TERRIERS.

Terriers, particularly, make good house and watch-dogs. Of the Fox Terriers, the long-coated one is more hardy and less nervous, if he is not so trim looking.

Of the many kinds of hunting dogs, Setters, Pointers, Hounds, and some of the Spaniels, all are good

ENGLISH SETTER.

companions, and the care and training which have been necessary to make them valuable in the chase have developed their general intelligence as well. For a house dog, of these varieties I would prefer a Cocker Spaniel.

If properly trained, he can do the work of a Pointer, Setter or Hound; he is not too large for the house, makes a good watch-dog, and is very intelligent. As a watch-dog, I would select a Setter or Pointer. They are of an affectionate disposition towards home-folks, but watchful of strangers. The smaller hounds are not very obedient, particularly when there is a chance of a dash after game. The Chesapeake Bay dog is primarily a hunting dog. He is good for treeing squirrels, and as coon dogs they never turn tail. As a watch-dog they are equal to the Mastiff.

But, after all, the dog for the farm or small country place is the Collie; aside from what aid he may give with tending and driving stock, he is especially the dog of the country. This has been his home for generations, and he is alive and alert to all that passes on the farm. There is no better or more intelligent companion, no better watch-dog. Indeed, I am so impressed with the fact that I have devoted the next chapter to telling more fully of his many good qualities.

CHAPTER V.

THE SHEPHERD DOG.

"I will not bite any dog," says the Shepherd dog, 'I must save my teeth for the wolf.'—Old Saying.

For a farm dog the Shepherd dog has no equal. There are two varieties—the Collie or Scotch Collie, and the bob-tailed English Sheep dog. The former is graceful, intelligent, affectionate and has every good quality any other dog has, except that he is a poor or indifferent hunting dog and is afraid of the report of a gun. Harriet likes him all the better on this account. He is usually afraid of thunder. A more intelligent dog never was born. I have one that understands by actual count the meaning of over one hundred and fifty different words. He knows some of them so well that when Harriet says in a conversational tone, "I guess we will have some chicken salad for supper," Bruce, who has been trained to keep the chickens off the lawn, will jump up and run to the window to see if there are any chickens scratching the flower-beds, and if there are, out he goes to drive them off.

COLLIE PUPPIES.

I told the story in the *Farm Journal* some years ago

of a little girl who was sitting in front of the fire with the toothache and said, "Oh, how my tooth aches! I wish I had a piece of sheep's wool to put in it." With that the Collie which was lying on the floor got up, went out and returned in a little while with the tail of a lamb, which he laid at the feet of the child, looking up, as much as to say, "Here it is."

In this brief space I cannot begin to tell the hundreds of authentic stories of the Collie's devotion to duty, intelligence and watchfulness.

No man could be more faithful or conscientious in his work. Here is a little story which will illustrate

TWO SPLENDID WORKERS.

this trait. The chief shepherd of a big flock in the West had occasion lately to change camp from the mountain-range to his feeding grounds.

The distance was three miles. One of the Collies had at the range a litter of five puppies, seventeen days old, which, as she was needed in the drive, she had to leave behind. The first night, as soon as the sheep were folded at the feeding ground and her responsibilities over, she went straight back through a driving snow-storm to her young, and spent the night with them. Next morning, however, true to her master, she was at the corral bright and early for her duties. She remained all day, guarding and herding the sheep, and at night-fall started back to her babies. This continued for eleven days. On the morning of the twelfth day the dog was late at the corral and the shepherd felt some

uneasiness about her. After a little time she appeared, bringing one of her pups, which had grown to considerable size, in her mouth. She had struggled all the three miles with it, over a rough road. It was evidently her intention to bring the pups all up to the corral, one at a time, without sacrificing any of her time with the sheep. Somewhat conscience-stricken at his neglect of the litter so far, the shepherd hitched up a wagon and went to the range after them. He secured them all, and gave them and their mother a warm nest close to the hearth in the farm house.

One more story illustrating the Collie's shrewdness. A farmer had sold a bunch of sheep to a new butcher in a neighboring town and loaned the butcher his dog to drive the

A FAITHFUL GUARDIAN ON DUTY.

sheep home. The dog drove them so well that the butcher became quite covetous and resolved to keep the dog and try to bargain for him next day. With this in view, he placed the dog, which by the way had never been locked up in his life, in an outhouse and left him there for the night. The dog, thinking that something was amiss, loosened a board, escaped from his prison, made an opening in the yard for the sheep and drove them all back home to his master, evidently considering that a man who would act as the butcher had was not an honest man and that the sheep had better be taken out of his hands as quickly as possible.

In form the Collie is about twenty-four inches high at the shoulder and weighs from fifty-five to sixty-five pounds. The entire form is firm, muscular, well knit, with no superfluous flesh. His coat, except on the head and legs, should be long, the outer coat straight and rather stiff, and the inside or under coat so dense and soft that it is hard to find the skin. The smooth-coated Collie differs from the rough only in the coat, which should be dense and quite smooth. In the matter of color there is great variety ; the most popular to-day is sable with white markings, although there are many which are solid black, black with white marks, black, tan and white and solid sable, or what some term fox color.

A Collie is ever on the alert. He can think and act for himself. His expression is open, jolly and engaging and not without cunning, the very picture of intelligence. On the hills of Scotland, where his training and instincts have been developed for generations, he and his master were usually far away from human associations and often alone together for weeks at a time. This training has made him somewhat shy and suspicious of strangers, but it drew him closer to his master, in whom he has unlimited faith. The Collie will watch and guard the children of the household ; he is quick to kill rats and all kinds of vermin. He will drive stray dogs off the place and keep tramps out of the yard. His sense of oversight of all that goes on on the farm is remarkable, and the guardianship of his master's property is his special delight. He is interested in it all and particularly in the family. He is never satisfied at night until all of us are at home,

and he will watch and listen for the tread of the last absent member and seem to breathe a sigh of relief when all are in.

The Collie is obedient, but no dog is more sensitive, and he will not bear harsh treatment or punishment or do good work for a cruel and unjust master. When once you have gained his confidence and affection he will obey every command willingly, cheerfully and to the best of his ability. A trained Collie will, unaided, take a flock of sheep out in the morning, care for them and guard them during the day as carefully and faithfully as if they were his children, and bring them back safe at night. He will drive and herd cattle, hogs, and poultry too.

More dogs are ruined with a whip than without one. After scolding your dog, or when you have fallen out, remember to make friends with him soon after.

The so-called Old English Sheep dog is less known in this country, but already has many friends here who have an increasing interest in this valuable breed. He is about the same size as the Collie and has all the latter's good points except beauty. The Sheep dog is certainly a homely fellow.

A FAMOUS OLD ENGLISH
SHEEP DOG.

His hair is dense and rather more curly than the Collie's. His hind quarters are large and heavy, standing somewhat taller than his front. It is the only breed of dogs, so far as I know, that has absolutely no tail at all. Once in a while a puppy will have a regular-sized tail or a short one, but the characteristic of the breed is to

be tailless. They have unbounded courage, and while they will not quarrel if they can help it, they are quick to guard their charges and to stop meddling and trespassing. The strong point of the Bobtail is his capacity for driving. The Collie cannot be beaten in guarding and herding the flock as it grazes, but the Sheep dog is a better driver, being more deliberate, quiet and patient.

SNOW KING,
Pure white Collie.

CHAPTER VI.

TRAINING THE COLLIE.

*"Whatever sad mischance o'ertake ye,
Man, he's the dog will ne'er forsake ye."*

JEANNIE DEANS.

Where I live we have no work in driving or herding sheep for our Collie, so that we have never had occasion to train him for this purpose. I give here, however, some helpful suggestions gleaned from various sources and pronounced correct by those who have had practical experience in the matter.

But one person should have the training of a Collie, and this one person should have the dog's care as well as his confidence and affection.

A simple scolding, not in a rough way but in kind and warning tones, or tying him up and chiding him, is all the punishment a Collie should have. Positively never strike him with your hands, or in fact with anything else, to correct his faults. A well-trained Collie will do his work by watching the motion of your hands. This is the best way for him; no matter how far away he is from the sound of your voice, provided he can

see you he will know what you want. A good way to teach hand signals is to take small pieces of meat and with a wave of the arm throw it one direction so he can get it, gradually lengthening the distance, then throw it in the other direction. He will soon learn the way your hand goes is the way for him to go.

In training a dog always use the same words of command, and as you give these commands accompany them with appropriate gestures. "Go fetch 'em up," "Head away," "Get out wide," "Slow, slow," "Hold," are some of the commands used by shepherds.

"HOLDING" A SHEEP TO HAVE
HIS PICTURE TAKEN.

A puppy should be six months old before his training is begun, and even then field work should not be undertaken until he has been taught to know and love his master

and to obey the first simple rules of dog conduct, coming when called and staying until told he can go.

When there are older dogs already at work with stock a puppy of three or four months will pick up much by being with them. The old dogs will often correct them for their faults.

Don't get angry, don't speak in a loud tone, don't expect too much at first, don't allow him to be with the stock unless you are there. It is the Collie's instinct to drive, yet untrained; while he probably would not hurt them, he would chase a flock of sheep to death. When you first start out with him to drive stock keep him with you, but don't let him work at all. Let him first get accustomed to the stock and them to him.

Never let a young and inexperienced dog try driving horses and cattle. In his eagerness and impetuosity he may get badly kicked, which will probably make him timid the rest of his life.

Teach the dog to lie down at the word "Down." The way to do this is to gently press him to the ground, repeating the word of command. As you move away from him he will naturally want to get up, but go back and repeat the lesson. When he has learned to keep the position until told to come, take him out with you to the stock and make him lie down. Then with a little feed or salt get the flock together and gradually work around to the opposite side from the dog, then call him. He will circle around the flock to come to you, and in a few lessons, by signalling with either hand, he will comprehend which way you wish him to come.

When going from you to fetch a flock never allow the dog to dash across in front of you, always make him go from behind you; it is apt to make them describe wider circles, which is what you want.

A gentleman who has trained many dogs teaches them "working around" by using a big dry-goods box placed in one end of the barn floor. When he has learned to go around either way as directed he then tries the dog in driving a few ducks.

If he should be inclined to run about and chase the stock, take a strong cord and tie it to his collar and give it a sharp pull, at the same time commanding him "Slow, slow." It is a good plan to train the dog when the sheep are tired; they will then be less likely to run and more apt to bunch up together. Start work driving in a lane or road rather than a field.

The young dog is very apt to nip the heels of the stock. He must be restrained from this. When a sheep lags behind or strays away, start after it. Just before he reaches it tighten the cord so that he cannot touch it. This will frighten the sheep and it will go back to the flock. The cord is the only way to teach a dog to go slow. As I have said elsewhere, one lesson must be thoroughly learned before another is attempted. It will be the work of several months to

train the young dog, and even after that there will be much for him to learn.

The tendency of the Collie is to drive stock too fast. Try to restrain him. Don't expect too much from a young dog. Some men haven't sense enough to drive stock.

Try to be alone when giving the dog his lesson; strangers will occupy his attention and distract him.

A well-trained dog will not run straight at the sheep, but will circle out and come around them.

Although a shepherd dog takes the greatest interest in and care of his flock, the sheep never return his affection.

An intelligent dog always watches his master for guidance. Don't waste time on a stupid or sulky dog, but be sure to give time and patience. A slow beginning may make a good ending.

CHAPTER VII.

TRICKS FOR DOGS.

An old dog cannot learn new tricks.—Harriet.

Every dog is capable of learning a few simple tricks, and the more intelligent breeds can be taught an unlimited number of amusing performances. The pleasure you and your friends will derive from what your pet can do, will amply repay you for all

the time and trouble you may take in his education.

Below I give the method I have employed in teaching some of my dogs their best tricks. In starting, I assume that the dog has been trained to come to you, to lie down and to follow you "to heel"; no dog's education can successfully be carried on until these necessary rudiments have been thoroughly learned. It is a very old saying that the way to a dog's heart is through his stomach, and it is equally true with most dogs that the way to their intelligence is by the same route. Have a cracker or some little reward when he is learning his tricks, and never forget to pet him and call him a "good dog" when he has succeeded. The hope of reward is a far better educator than fear of punishment.

MINDING BABY.

In training dogs have the room quiet so that they can pay attention. Each lesson must be thoroughly learned before the next is tried, and always go through the old ones before starting the new. Use as few words as possible to convey your meaning, but these words should be pronounced slowly and distinctly in a firm but calm voice.

You can teach a dog to shake hands by taking his paw and shaking it, at the same time saying, "Shake hands." Be careful always to take the same paw.

A FRENCH POODLE.
Knows as much as
some boys.

Take a feather and tickle the dog's nose, and he will immediately commence to sneeze, and at the same time command him in words to "sneeze"; he will not like the feather very much, and by and by, as though his imagination foreshadowed it, he will sneeze by merely having it pointed at his nose, and in a little while he will learn to sneeze at the mere command to do so.

I used to have an Irish terrier which when I asked him, "Mike, which would you rather do, live in America or die in Ireland?" would keel over, close his eyes and remain perfectly still. I taught him by placing him on his back, holding him gently on the floor and repeating the words "die in Ireland," "die in Ireland," over and over. He persisted for a long time in wagging his stump of a tail just a little and in peeping out of the corner of his eye to see what was going on, but he soon learned to feign death perfectly. A favorite question is, "Which would you rather do,

live a Republican or die a Democrat?" or vice versa according to your politics. Of course, the dog must be trained to die at the word "Democrat" or "Republican," as the case may be. Don't let him get up until you say, "Alive again."

To teach the dog to walk erect, hold a bone or something in a spoon a little above the dog's nose, but not so high as to lead him to jump to get it. As he reaches for it, induce him to rise upon his hind feet, saying as you do so, "Up, up." When he reaches the proper standpoint, let him remain there a second or two and then let him have the bone. Soon he will stand upon your merely holding your hand in the position described and saying, "Up, up." Then he may be taught to walk in this position by slowly moving the bone or your hand slightly in advance. These exercises should not be tediously prolonged, especially at first, for the position is an unnatural and very fatiguing one to the animal. After he thoroughly understands what is required of him you may check any attempt he may make to regain his natural position before you are willing, by a gentle tap under the chin or under the fore paws.

FOXHOUNDS IN
FULL CRY.

He may, if preferred, be taught to beg without learning to stand erect; in this case he may be made to sit down, and then, pressing his haunches down to prevent his rising to his feet, tap him under the chin till he takes the right position, or better yet set him up.

in the corner of the room. Repetition is, of course, necessary until he learns what is desired, and each time you place him in position it is well to say "Beg" two or three times, so he may associate the word with the act. Dogs, like many of the human race, after they have got the hang of it will beg persistently for the sake of an occasional trifling reward.

It is better to let the dog thoroughly master begging before it is attempted to teach him to "speak for it." Take a piece of some article of food which he is fond of, and allowing him to see it, command him to "speak for it." Of course he will not understand what you mean, and will probably only gaze

OFF TO MARKET.

wistfully at the morsel. By and by he will grow impatient and give vent to a sharp bark. The moment he has done this give him the article, for although he has not understood you he has done what you desired, and by rewarding him he learns that this is the case. If at first he does not show an inclination to bark he may be stimulated to do so by your giving a "bow-wow" yourself.

In teaching your dog to toss a morsel in the air and catch it, hold a switch or your hand under the dog's chin, and tap him whenever he tries to lower his head to let the meat drop. If he does not presently jerk his head up, and so throw the morsel into the air, you should strike him under the chin a pretty smart rap to make him do so. When it leaves his nose there will be no instruction required to make him seize it promptly before it has a chance to reach the ground;

should it, however, touch the ground, it is well to take it from him and make him toss it again.

A dainty dog, Jean, belonging to a young friend, brings her tablecloth, a newspaper, and spreads it out on the floor. The paper was placed in her mouth and her jaws held together to prevent the paper falling out. She was led from the closet, where the paper was kept, across the room to where she was fed, her mistress repeating constantly, "Tablecloth, tablecloth." When she reached her destination she was rewarded by her meal. Jean learned to bring her tablecloth in five or six lessons. Now when she is hungry she sometimes goes of her own volition and gets the newspaper. If she is not hungry it is often impossible to get her to bring it, which shows better sense than many people have.

The same friend had a fox terrier which she taught to spell his name, "Odie." The mistress would say "O" and wait for him to bark, then "d" and wait, then "i" and "e." After a few lessons he would bark four times and then stop.

The outline here of a few simple tricks will suggest to you the method by which many others may be acquired. I have seen dogs dance to music, jump over chairs and through hoops, put their heads down in their paws and close their eyes as in prayer and not rise until you say "Amen," walk on their front feet, bring their tail in their mouth, carry lunch out in the field to their master, jump rope, dance, and many other

SMOOTH-COATED ST.
BERNARD.

like accomplishments. I knew a dog that would take a penny to the butcher and buy each day his supply of meat, carrying it home in a little basket.

Another trick. Hold the dainty before him, keeping his mouth shut, saying, "Trust, sir, trust." Then loose his mouth and say, "Paid for," as he eats it. He will soon learn not to take it until it is "paid for."

Your dog could master many, or all of these. Be gentle, firm and have a good stock of patience and you can work wonders with him. Hunting dogs should not be taught tricks. Collies are not good trick-dogs, they are too dignified.

CHAPTER VIII.

CATS.

I thoroughly believe that you cannot kill a cat with kindness.—Harriet.

Do not deny the children the pleasure to be derived from intimacy with pussy. Of course there are cats and cats, as there are good and indifferent people, but I mean the ideal home-cat or romping kitten.

But only about one growing child in twenty is a proper person to have a kitten or a cat, and nothing is more distressing to me than to see a kitten being mauled and hurt by a child, often unintentionally, but more often "just for fun." While a good-tempered, full-grown cat will not knowingly scratch or bite children, and will submit to many indignities at their hands, only endeavoring to get away, a kitten knows no such restraint. Children are then apt to find, as a little girl expressed it, that "Pussy has pins in her toes."

Many persons neglect to teach their children what kind treatment is. If only for self-interest, they should

remember that a tame and affectionate cat is far more valuable and companionable than some wild, frightened, crabbed creature.

I am one of those who believe that cats are capable of deep affection for their guardians, for I have

NAPOLEON.
French Angora.
Valued at \$5,000.

seen many cases where cats have mourned the departure, or gladly welcomed the return, of those they have loved and trusted.

Cats have some advantages over dogs as home-pets. They are less clumsy, they take up less room, do not eat so much, are not so noisy, nor do they track dirt into the house on a muddy day. They are as good, or better, as ratters and mousers, and seldom have any odor, a fault from which few dogs are free.

Cats, in their nature, are clean, sagacious, tenacious of life, brave, independent, and usually self-sufficient. They are irritable by temperament, sensitive to changes of weather, to frost, to thunder; they are excitable, and naturally disposed to bite and scratch when at play; there is a tendency in them to lose their heads when in high spirits.

A cat's attachment to her home is very great. She is unhappy and distressed if she leaves it, and tries her very best to get back to it if taken away. Many stories are told of the distances cats have traveled in going from a new home back to an old one, and of obstacles they have encountered; on the other hand, a dog will be happy and contented in any place if he is

with his master or his family. Cats will not take punishment well; if they are struck their temper rises, they may strike back, and are less forgiving than a dog. Beyond a gentle tap to a kitten, a scolding will usually be rebuke enough. In some ways, cats are smarter than dogs, their attainments running in different directions.

SIAMESE CAT.

Don't let the boys sick the dogs on the cats. In every well-regulated household the cat and dog should be on friendly, if not intimate, terms.

The cats at the barn should have a saucer of milk at milking time. Their systems need milk, particularly if they have been catching and eating rats, and you must remember that, when all the mice and rats are killed, the picking around the barn will be pretty poor, and pussy, if hungry, has nothing else to do but turn her attention to birds and young poultry. By the way, I cured a young cat of chicken-killing by the method described on page 11.

YOU NAUGHTY CAT!

Cats should be fed regularly; they should have access to grass or catnip, which they use as medicine, and also to fresh water. We all know that milk does not quench thirst.

A young acquaintance of mine, by the way, says that it is a mistake to feed cats nothing but bread and milk. She says the yeasty fermentations from the bread cause indigestion and fits, and the lactic acid

from the milk breeds in the cat's stomach, as it does in cheese, myriads of worms. Under these conditions, the cat soon becomes emaciated, coughs, has a poor appetite, loses its hair, and finally dies, a victim to its owner's ignorance.

Many cats are fond of celery, asparagus, and other vegetables. A mixed diet of scraps, such as comes from the table, is the best diet for cats. Rice pudding makes an excellent feed. As a general rule, no meat or fish should be given raw. Cats like their food warm, especially in winter. Sour milk is likely to produce stomach troubles.

Cats can be trained to perform tricks, but I never yet have seen a cat that looked happy while performing; they should be trained when young. The first

OUT FOR A RIDE.

lesson should be to teach them to love and obey, not fear you; that accomplished, you will not find it so hard to teach them other things, but it will require great patience in repeating over and over what you want done.

Harriet has a solemn cat, named Solomon, who will get in a basket, and be pulled up to the second story, when his mistress does not want to go down-stairs to let him in.

Jumping is a feat easily learned; cats have great jumping powers, which can readily be increased by practice. A common trick is to teach pussy to jump through your arms; begin by holding them low in front of you, with pussy between you and them; after she gets accustomed to that you can hold them to one

side and increase the height by degrees, until you get them right over your head while standing erect.

With a little patience many other tricks can be readily taught, such as ringing a bell, standing on their hind legs and begging, giving you their paws, playing dead, going to lie down in a designated place, shutting a door, or opening one with a latch to it, making her follow you about the house or street,

READING!

come to your whistle like a dog, or retrieve, that is bring things to you when told. After each performance you should reward your cat, either by gently caressing her, or giving her a little dainty

ANGORA CAT IN
CAT BASKET.

morsel to eat of what she likes best.

You can usually tell when a cat lives at a home where she is appreciated by the sleek and well-kept appearance. A neglected cat soon bears evidence in itself and does not seem to care how she looks.

Never use a comb in cleaning a cat, it breaks the hairs and renders the coat rough. Brush the coat well with a soft brush, or rub with a mitten. Washing the cat is a difficult job and never necessary or advisable unless for some special reason, or for a white cat that has gotten soiled.

To wash a cat, make a soft soap-suds, comparatively thick, apply commencing at the hind quarters and tail, and gradually rub in until the ears are reached. After the soap-suds have been thoroughly

rubbed in, dip the animal, hind feet first, into a tub of tepid water to rinse it off. It should then be wrapped up in a soft towel and the excess of water pressed out; then put in a basket of clean oat straw and kept in a warm place, where it will finish the drying and cleaning for itself by rolling in the straw and by licking itself, after which it can be brushed with a soft brush.

WHITE ANGORA.

When a white cat is washed it improves its color to rinse in bluing just like a white garment.

Don't try to transport a cat from one place to another without carefully securing it in some way. It is cruel to put it in a bag. Put it in a basket or box and see that the lid is fast. Cats are often lost in this way, and they are so scared and frantic that they seem to completely lose control of themselves.

Long-headed, sharp-nosed cats are said to be the best ratters and mousers.

Don't throw the cat up in the air to see if it will always alight on its feet. It always will.

Contrary to the generally accepted idea, a starved cat is a poor mouser. Its sense of smell is developed by good care and feeding.

If the cat is kept in the house a pan half filled with dry earth should be kept where she can always have access to it night and day. With care there need be no trouble.

Cats are said to be good weather prophets. If a cat is seen to wash her face with vigor, it is going to be stormy, and if she sits with her back to the fire, it predicts cold weather.

A cat that is well fed and cared for will seldom want to go roaming at night. Let her have the run of the house, give her a bed in a corner and she will be contented and happy.

Give the cat a little lump of butter on each paw once in a while or dab her here and there with fresh cream. She will clean herself all over and the cream and the licking will make her coat glossy and sleek.

CHAPTER IX.

VARIETIES OF CATS.

The hundred dollar cats don't seem to have nine lives like common barn cats.—Tim.

Excepting for the differences in color few people realize that there is any difference in cats. The common cat of almost all our households is the short-haired European cat, which has been a companion of civilized man for many centuries. Of these cats the color is the chief variation, and some of these have become so characteristic that they have become distinctive of a particular strain or breed; thus many of the so-called breeds are simply designations of different colors. But even these colors are not absolutely fixed, for striped parents may have solid-colored kittens and vice versa. Tortoise-shell cats may be produced by a solid-colored father and a tortoise-shell mother, and so on.

The long-haired cats of the Angora style are more rare and are just at present the varieties most sought after. They require a great deal of care to keep their coats in order, and their constitutions are not so strong as the native kinds. Solid-colored cats are usually esteemed more highly than striped cats, yet on the other hand tortoise-shell cats are among the most prized of our short-haired varieties.

The TORTOISE-SHELL in color should somewhat resemble the color of a tortoise-shell comb, being a black, red and yellow; no white is allowed on any part of this variety. The markings must be not only deep in color, but distinct and blending evenly where they meet. Tortoise-shell toms or he-cats of that color, without any white on them, are very rare; instances have been known where from one hundred to five hundred dollars have been offered for a single cat; any cat that would bring that much money would certainly be sure of a good home. Pure tortoise-shell females are much more common.

There is another variety of the Tortoise-shell with white on it, in which the fore legs, lower part of the hind legs, breast, throat, lips and a circle around them and a blaze on the forehead are white, the balance being tortoise-shell. The head of the Tortoise-shell is small and inclined to be round; ears moderately large and pointing forward; the tail is long and also marked. The eyes are an orange yellow. Altogether the Tortoise-shell is a graceful, slender, attractive cat.

WHITE CAT.

BLACK or WHITE CATS are cats of these solid colors. The black cat is apt to be the larger of the two. He is bold, brave and fierce, full of life and daring, and not so fond of being petted, is more apt to be a greater thief, but is likely to be more cleanly about the house, and healthier and more hardy in constitution; while a white cat is more quiet, and of a gentler and more loving disposition, fond of petting, more honest, but of a weaker constitution, and

not so easily trained to habits of cleanliness. To be considered first-class a black cat should not have a particle of white about it anywhere, and the same is true with black hairs on a white cat. A good white cat with a short, smooth coat, which must be kept scrupulously clean, is a handsome animal. The eyes of the black cat should be orange color; of the white cat blue or yellow, the former being much preferred. A black cat will get gray hairs through its coat as it gets old.

In addition to these solid colors there are gray, red and blue cats. The blue or so-called Maltese is not of a real blue, but of a slate or mouse color. When I was a boy they were quite rare, but now are comparatively common. They are supposed to have

TWINNS.

TABBY CAT.

come from the Island of Malta, hence their name. Those with blue eyes are preferred. They grow to a good size and are strong and hardy after passing through kittenhood. Their heads should be rather short and broad across the forehead, with short ears, broad at the base.

The BROWN STRIPED TABBY is one of the largest of our domestic cats. The color should be a rich, dark brown with markings or stripes of deep glossy black. They should have soft, rich fur and the

stripes should be of uniform width. The markings should be graceful in curve and should be closely

defined, that is, the brown and black should be sharply separated. These cats make the best ratters and mousers. They are sometimes called Tiger cats. Their eyes are orange color, slightly tinged with green.

The BANDED RED TABBY has bands of deep red on an orange ground, making it a handsome cat. In addition there are yellow, brown, chestnut, gray, silver, light gray and white striped tabbies. The great consideration with any of these should be the distinctness, gracefulness and regularity of the markings and the smoothness of their coats. Still further, in addition to these varieties or rather colorings I have named are Tabby cats which are more spotted than striped. They have a ground color of light gray, mouse, red, brown, or dark gray with spots of black or white.

The mixed-colored cats, as a general thing, do not attain the size of the solid-colored cats. The principal feature in selecting a cat of any of the above colorings is to see that the markings are sharp, distinct, and evenly located. The size should be as large as possible without being too leggy; the head should be shapely with ears not too large and with eyes that match the

PERSIAN
TABBY CAT.

predominant color of the cat's coat; the coat should be smooth and glossy, the hair short and the tail long but not bushy.

The Asiatic or long-haired cats are thought to be more delicate, particularly as kittens, than the European or short-hairs; they are not such good ratters or mousers, but they make nicer pets, being of a more affectionate disposition, and are fonder of other animals, such as

dogs, rabbits, etc. Their love for their master or mistress ends only with death. In the country they will roam around a great deal, a habit which should be discouraged if intended for breeding or exhibition purposes.

The ANGORA cat, like the Angora goat, has long, silky hair, small head and rather short nose, large eyes harmonizing with the color of the coat, small, pointed ears that are rather hidden by the heavy mane which is full and fluffy around the neck, and a long tail curving upward with the hair on it longer near the body than at the top. The body is long as compared in proportion with common cats. Angora cats are of all colors, popular in the order named—white, black, blue or Maltese, orange or red, slate-colored, fawn, mottled gray and light gray. Mixed colors are more common than solid colors.

ANGORA KITTEN.

The white Angora should have blue eyes to meet popular fancy. The black and yellow's eyes should be amber. These cats do not reach maturity until about two years old. They have good dispositions, are playful and friendly, but the females particularly are apt to be nervous. The illustration on page 52 shows Napoleon the Great, a pure French Angora, with bushy, orange fur. He weighs twenty-three pounds and his owner has refused an offer of four thousand dollars for him.

The PERSIAN cat is perhaps the choicest of the long-haired varieties, particularly when pure black, with a big fluffy mane and orange eyes. Next in popularity

comes the pure white with pink eyes. No cat is more beautiful when its coat is kept in good order, and none

PRIZE-WINNING WHITE
PERSIAN.

Value, \$2,500.

more bedraggled and untidy when dirty and neglected. It is difficult for an amateur to distinguish between a Persian and an Angora. The hair of the Persian is longer, straighter and coarser; the cat is longer in body, with a longer and fuller-haired tail. On this account it looks even larger than the Angora. The colors are like the Angora, and the temper is said to be less dependable, nor are they so intelligent.

The RUSSIAN cat's characteristics are its unusually large body and relatively short legs. Its fur is denser and longer, particularly around the neck, while the tail is covered from base to tip with hair of equal length. In color they come in as many varieties as the other breeds I have named.

Very many of the long-haired cats are crosses of the Angora with the Russian or Persian cat, and it takes an expert to distinguish those really pure bred.

In this country there is a purely American breed called the COON cat, with long hair, now quite common in our New England States, particularly in the State of Maine. Not long ago a consignment of these cats was sent to my neighboring city, and while not sold as Angoras, Persians or

COON CAT.

Russians, there was not one person in a hundred who could tell the difference. The kittens sold for from five dollars to twenty-five dollars each. It is said to have originated by a cross of the original cat with the raccoon. They are not so domestic as our common pets, yet if allowed plenty of liberty they are affectionate, intelligent and as pretty as any.

The SIAMESE cat is attracting attention. It is a rather small, lithe and graceful short-haired cat. They are light, silver-gray or fawn color, with black ears, legs and tails. See illustration, page 53.

The MANX cat, but little known in this country, is the name given to cats without tails or with only a very small one. The Manx cat is a great forager, runs like a hare, is docile and biddable. They are found in all cat colors. There are still other varieties, as yet but little known here.

MANX CAT.

In recent years the raising of fine cats has become a profitable industry and numerous "catteries" have been established in this country. A well-bred kitten of some of the popular breeds sells from ten dollars to thirty dollars, and as yet the supply has not outstripped the demand. This is something that the women and girls of our country homes could manage. I have heard of a young girl in the country who started with three Angora cats and from them raised eighteen kittens. From the profit on these she was enabled to go to boarding school for a term and had money over to help pay the debts of the household.

The best results in raising kittens are obtained where the cats are made a part of the household and given the run of the house and grounds. The

KING MAX.

A Full-Blooded Angora.

kittens are thus home-broken, and if kindly and intelligently treated have better constitutions and are more friendly than when raised in a cattery. When raised in this way great care must be taken that the breed does not become mixed with the common cats of the neighborhood. A kitten that will bring a

good round price must be one of pure breed and pedigree and in itself attractive and handsome.

A cattery is nothing more than a well-built, airy and dry poultry house, warmed in winter, with good, dry out-door runs enclosed with wire netting. But I would advise none of my young friends to go into the business on this scale until they have first succeeded in raising cats of high degree around the home.

CHAPTER X.

DISEASES OF DOGS AND CATS.

With dogs and cats, particularly, prevention is much easier than cure.—Tim.

A dog or a cat, having the run of a farm or village home, with a clean, dry place to sleep, and intelligent care as to feed, should have very little to trouble it in the way of disease. Most troubles come from lack of exercise and improper feeding. The ailments of domestic animals are singularly like those of the human family, and if there is no veterinary doctor to be had, and your family doctor has his heart in the right place, he will not hesitate to prescribe for the sufferer. It would not, however, be professional etiquette to offer him a fee for the service.

A dose the same size as that for a man would be right for the big dogs—Mastiffs, St. Bernards, etc.: a dose half the size for middle-sized dogs—Pointers, Setters, etc.: and one-quarter to one-eighth the size for the little fellows; and one-eighth to one-twelfth for cats. In regard to age, the mature dog one part, the yearling three-fourths of that amount, from six to nine months old one-half dose, and from four to six weeks old one-eighth part.

You can usually trick your dog into taking his medicine by concealing it in some dainty. Most dogs will take castor oil, cod-liver oil, and other remedies, if they are mixed up in a little soup. Other remedies,

particularly homeopathic, can be mixed with the drinking water. To administer medicine that cannot be given in these ways, have some one hold the dog firmly between the knees, and hold open the mouth by twisting a towel around the upper jaw. If a pill, put it well back on the tongue, and hold the mouth shut until the dog swallows. Liquid medicine can be poured into the pocket formed by the lower teeth and lips, then when the mouth is closed, this will trickle through the teeth.

No animal is so determined and self-contained as a cat; no young of any kind is so difficult to feed

PUSSY HAS A BAD LEG.

against its will. A well cat is hard to kill; a sick one is equally difficult to cure. In the administering of medicines, or in the performance of surgical operations upon the cat, greater care is necessary than in the case of the dog. The cat will inflict severe injury upon the person of even its most familiar friend; so in order to proceed

with safety, it is necessary to roll the cat in a piece of rather thick but pliable cloth, sufficiently large to go around the animal's body three or four times; have the fore legs well placed beneath the body before starting to roll the animal in the cloth; allow only the head to protrude, then have assistant hold the animal upon the lap, with the lower extremity between the knees. Do not apply pressure enough to injure the animal, but hold firmly. Now, with a stick like a meat skewer open the jaws, and by means of a

spoon slowly pour the medicine well back upon the top of the tongue. The cat greatly dislikes being smeared with anything; so be careful not to get the medicine upon the fur, or, in case it should, it must be sponged away carefully. A pair of tough leather gloves should be worn as a protection against the teeth and nails. The sick cat is generally as sick as it appears, or even more so. Provide the patient with comfortable quarters as soon as possible. A quiet room without carpet is good; there should be a shallow box filled with ashes or sawdust; another box should contain a soft cushion, and, if the season demands it, heat should be supplied, but the animal should not be allowed to get in a very warm place, as, for example, beneath the stove.

DISEASES OF THE DIGESTIVE APPARATUS.

CANKER OF THE MOUTH—A disease of the dog and cat, common in aged animals and in those closely confined or fed food unsuitable or in large amounts.

Symptoms.—Difficulty in chewing, dropping food from the mouth, bleeding from the gums, fetor of the breath, deposit of tartar around the teeth, loose teeth, decayed teeth, spongy gums.

Treatment.—Remove loose teeth and all tartar, wash mouth with salt water three times daily, after which wash mouth with listerine and water, equal parts, or with peroxide of hydrogen and immediately afterwards with tincture of myrrh applied with a camel's-hair brush. Feed soft foods and sparingly of meats.

CHOKING may result from rapid eating of bones or tough meat.

Symptoms.—Animal distressed, frequent attempts at vomiting; may detect the foreign body along the lower margin of the neck. Do not mistake the top of the windpipe for the obstruction. By external manipulation with the fingers it can often be remedied; give occasional small amounts of sweet oil or other mild grease; in urgent cases send for veterinarian, as instruments may be required.

COLIC.—Acute pain in the stomach and bowels; rather common in puppies and kittens. It is rarely fatal, but repeated attacks indicate faulty condition of the digestive organs.

Symptoms.—Sudden severe uneasiness, animal moves around distressed and may howl or moan at times. Abdomen often distended with gas.

Causes—Most common from fermentation of the contents of the stomach from overeating or from spoiled food. In puppies and kittens may be due to the inability to masticate food perfectly.

Remedies.—If severe give 20 drops of chloroform in milk or in teaspoonful of glycerine, well mixed. This dose is for animal of 15 to 20 pounds weight. May repeat in 30 minutes. If swollen with gas give following every 4 hours: Soda bicarbonate, 15 grains; essence of ginger, 5 drops; water, $\frac{1}{2}$ ounce. Mix.

INDIGESTION.—Simple acute indigestion in the cat often follows engorgement of the stomach with food. The natural method of relief in such cases is by means of vomiting; grass, and other green vegetation, or even hay is frequently eaten by the cat for the purpose of inducing vomiting. Cats should always have access to grass or catnip. In cases in which the vomiting is persistent, give 2- to 3-grain doses of subnitrate of bismuth twice or three times daily. Catnip tea is also useful in doses of 1 to 2 teaspoonfuls. Feed regularly and rather sparingly of food of the best quality, boiled milk, lean meat only, and little or no vegetables.

Medicines.—Bismuth as above directed; also 5 drops tincture gentian twice daily.

CHRONIC INDIGESTION may follow several attacks of colic. It is a more serious condition than colic.

Symptoms.—General unthrifty appearance, appetite depraved, animal apt to eat filth of any kind, as manure and other foreign bodies; may have attacks of colic, bloating, diarrhoea, or in some cases constipation may be severe. Mouth pasty, breath offensive.

Causes.—Like those of colic, some fault in food or feeding. Lack of exercise and bad drainage or unclean condition of kennels also a frequent cause.

Treatment.—Take of castor oil and glycerine each 1 ounce, oil of cinnamon, 5 drops; mix well. Give the animal from 1 teaspoonful to 1 $\frac{1}{2}$ ounces of the mixture. After the bowels are emptied by the above dose, secure the following pills and give 1 pill twice daily for dog of moderate size: Extract nux vomica, 10 grains; powdered rhubarb, 20 grains. Mix, and make into 30 pills.

Give small quantity of salt each day in the food.

For bloating give small doses of bicarbonate of soda daily in milk.

DIARRHŒA is also the result of indigestion in puppies, kittens, and also in very old animals on account of poor teeth.

The attack may be sudden and acute with all the symptoms of indigestion. May be severe vomiting. Discharges from bowels frequent and offensive. Weakness may be alarming.

In chronic cases less pronounced symptoms.

Treatment.—Pure air, clean surroundings, good food in small amounts, pure water.

Give first a purgative dose of castor oil, from a tablespoonful to 1½ ounces, according to size of animal.

If severe, secure following prescription, give from 1 to 6 tablespoonfuls, according to size of animal, every 4 hours: Tincture of catechu, 2 ounces; laudanum, 4 drams; chalk-mixture, 2 ounces; tincture of ginger, 4 drams. Mix. Shake well.

PTOMAIN POISONING.—*Cause.*—The feeding of spoiled foods, especially meats. Often fatal.

Symptoms.—Fetid breath, foul mouth, gums often inflamed or even ulcerated, severe vomiting, diarrhœa; later, animal greatly prostrated, and later, insensible.

Treatment.—Cleanse the mouth with salt water, give full purgative dose of castor oil, and follow with from 5 to 20 grains of salol 3 times daily for 3 or 4 days. Give clean water and good supply of air.

DYSENTERY differs from diarrhœa in the character of the discharges and in being more often fatal. Discharges slimy mucus, and often bloody.

Treatment.—Enema of ice water should be employed if the temperature of the animal is over 103° F. Calomel in doses of from 1 to 5 grains at intervals of 6 hours for a day or two only.

CONSTIPATION.—Common in animals kept in confinement. Lack of exercise a cause.

Symptoms.—Difficulty in emptying the bowels, feces of hard character.

Treatment.—For many cases simply exercise the animal; in severe cases give full dose of castor oil. Enemas of warm water and soap or glycerine repeated every half-hour are necessary in severe cases or when the trouble is due to the rectum being

packed with hard feces or pieces of bone. Do not attempt to treat such cases with violent purgatives.

VOMITING occurs readily in both dog and cat. Not alarming unless repeated frequently or if ejected matter is bloody, which is an indication of irritant poisoning. Defective diet and overeating a cause. If common in an animal reduce and change the kind of food, give abundant exercise. If of frequent occurrence give the animal from 3 to 10 grains of subnitrate of bismuth an hour after meals.

WORMS.—Parasitic worms are very common in the intestines and stomach of the dog and cat. The belief that puppies are born with worms is not based upon fact. The eggs of worms are taken by the puppy while nursing. Mature worms, filled with eggs, are passed by the puppy's mother or other dogs, and the eggs adhere to the teats of the mother-dog or to the food. The puppy becomes infected in that manner. Small amounts of worms cannot be said to be injurious, but as all parasites should be combated whenever possible it is well to treat the animal as soon as worms are noticed. All worms passed should be destroyed by fire.

Worms frequently receive the blame for almost any ailment the dog may have, but more puppies die from worms than from any other cause.

Symptoms of stomach worms in puppies.—Enlarged abdomen, called pot-bellied, vomiting of the worms, thin condition, indigestion, and the passing of worms from the rectum.

Remedies.—Prevent infection by having the mother as free of worms as possible, have kennel as clean as possible, have the mother well fed that her milk-flow may suffice to nourish the young well. A starved or debilitated animal falls an easy victim to parasites of any kind.

The most troublesome worm in the cat is the round thread worm which occurs in the stomach. It is sometimes the cause of vomiting, during which the worms are thrown off along with frothy mucus. The remedy is santonine in doses of 1 to 2 grains *only*, after fasting, followed in an hour by a tablespoonful of castor oil.

Treatment of stomach or round worms.—The following is effective: Take of santonine 10 grains; divide into 20 powders; give from 1 to 3 powders in small quantity of milk, every 5 days on empty stomach. Follow each dose in half-hour with a purgative dose of castor oil. Give remedies for worms on empty stomach.

SMALL WORMS OF THE RECTUM.—Thread-like worms are sometimes the cause of trouble, causing great irritation and rubbing. The parasites being about one-half inch long may escape notice. The treatment is as follows: Take of quassia chips 1 ounce; add 1 pint boiling water; allow to cool; strain through muslin, and with a syringe inject the rectum with 1 to 4 ounces of the liquid once daily.

TAPE WORMS, as the name indicates, are flat worms. They are formed of segments which increase in size from the head towards the opposite end of the worm. As the segments become mature they are dropped off and come away with the feces of the infected animal. These segments are filled with eggs. To rid the animal of tape worm the small or head end of the worm must come away.

Remedy.—From a reliable druggist secure some powdered kamala. Two grains is the amount required for each pound of body weight of the dog or cat. The stomach should be quite empty, so fast the animal for 12 to 24 hours before giving the kamala. No purge is required, as kamala has a purgative action of itself.

Watch the passages and examine with low-power magnifying glass any parts of the worm which may be found. If the head, armed with a circle of hook-like organs, is found, it means one worm secured. There may be two or more present in the same animal. The dose of kamala may be repeated in 4 or 5 days.

Grass is a natural medicine for dogs and cats. In small doses, it acts as a purgative; in large ones, as an emetic. The quantity eaten by the animal is generally regulated by the wants of nature. Grass also has valuable medicinal properties, and a dog or cat, in health and sickness, should have access to it.

DISEASES OF THE BREATHING ORGANS.

CATARRH.—Simple catarrh is not rare in both dog and cat. It is at times confounded with distemper. Simple catarrh is not contagious.

Symptoms.—Evidence of chilly feeling, shivering, temperature may reach 103° F., or even higher, nose hot and dry with more or less discharge. No cough except when laryngitis (sore throat) or bronchitis is present. Appetite more or less impaired.

Treatment.—Warm, clean quarters, good air without currents. Tempt appetite with varied food in small quantities. At

the beginning of the attack give quinine in doses of from one-half to 5 grains and repeat once only 4 hours later. Keep nostrils clean by sponge and tepid water.

Cause is exposure to cold or wet or filthy surroundings.

LARYNGITIS.—Inflammation of the lining membrane of the throat.

Symptoms.—Difficulty in swallowing. Differentiate from rabies, in which the swallowing may be impossible on account of the paralysis of the throat, tongue and lower jaw. In laryngitis the throat is sore upon pressure.

DIPHTHERIA.—Many authorities claim that cats are subject to the above-named disease. The writer has seen cases which certainly at least closely resembled the disease, and considers cases presenting the following symptoms should be isolated and watched carefully: Sudden difficulty in swallowing and in breathing and the throat upon examination internally showing greater or less presence of membrane adherent to the lining of the throat. The membrane presents a raised appearance and a dull white color. Open the jaws as directed in giving medicine, and with an atomizer spray the throat with full strength solution of hydrogen peroxide. Repeat twice or three times daily.

Cause.—Exposure, tight collars, excessive barking.

Treatment.—Avoid large doses, as danger of choking is great. Get the following: Take of powdered chlorate of potash 2 drams; simple syrup 1 ounce. Mix. Give teaspoonful 4 times daily.

BRONCHITIS.—Inflammation of the lining membrane of the windpipe and bronchial tubes.

Causes.—Same as in laryngitis, which it may follow or accompany.

Symptoms.—Fever, cough, first dry but later more frequent and with discharge of mucus from nose. Respiration frequent and may be difficult.

Treatment.—Warm, clean, but well-ventilated room. Feed broths or beef tea.

As medicine get syrup of ipecacuanha 4 drams. Give from 10 to 40 drops every 3 or 4 hours, according to weight of the animal. Also give from 15 to 60 drops of compound tincture of cinchona twice or three times daily.

PNEUMONIA and PLEURO-PNEUMONIA.—Inflammation of the lungs. May follow severe bronchitis or accompany it.

Symptoms.—Similar to bronchitis to ordinary observer. Temperature high, animal sits on its haunches, breathing difficult; if pleurisy be present the chest is painful on pressure. The appetite small or entirely lost.

Treatment.—Secure cleanliness, air and food, as in treatment of bronchitis. Keep animal well blanketed. The medical treatment of pneumonia is best left to an expert, as it is decidedly intricate.

DISEASES OF THE SKIN.

ECZEMA.—Frequently confounded with mange, from which it differs in not being due to a parasite and in not being contagious.

Symptoms.—Inflamed and itchy condition of the skin, commonly in the region of the back, neck, top of head and root of the tail. Scratching violent, skin inflamed thereby and becomes reddened and exudes a thin serous discharge which hardens and forms a scab. This later is scratched off, leaving a raw, angry surface. The diseased area may spread over the entire upper surface of the body. The odor of a bad case is very offensive.

Internal Treatment.—Give Fowler's Solution, dose carefully regulated to the weight of the animal. For animal the size of a fox terrier start with 2 drops twice daily. Continue for 5 days, then increase each dose 1 drop each day until 12 drops are given at each dose. Continue at this amount 1 week, then decrease the dose 1 drop each day. Any swelling or decided redness of the eyelids is indication that the drug be discontinued for a few days. The skin should be kept clean by bathing and drying thoroughly. The diet should consist of boiled vegetables as much as possible; small amounts of well-cooked fresh meat is allowable, but regular and complete exercise must be enforced.

MANGE.—A disease of the skin due to microscopic parasites. Differs from eczema in that it first most commonly attacks the soft skin of the under surface of the body. The dog with eczema enjoys being scratched, but in the case of mange the skin is decidedly painful to the animal. The diagnosis is confirmed by the microscope, by means of which the parasites may be seen.

Treatment.—Give frequent baths with warm water and soap, dry well and apply enough of the following mixture to anoint the skin: Take of crude petroleum 1 pint, Venice turpentine 1 ounce, oil of tar 4 drams, flowers of sulphur 8 ounces. Mix

FLEAS AND LICE.—Most dogs have fleas, and about the best one can do is to keep them reduced to a minimum. Even if you get your dog free from them he will be sure to gather up a new supply if there are any around or he meets another dog that has them.

In winter spread newspapers on the floor and lay your dog on them, then dust Dalmatian or Persian insect powder over him, working it with the hand well into the roots of his hair. The fleas will drop out; gather them up and burn them, as they are only stunned. In summer nothing is better than washing with some good dog soap. As you rinse the lather off the dead fleas go with it. Another plan is to take a piece of linen, saturate it with kerosene and rub well into the hair. Then wash off with soap and water.

HARRIET
WASHING
FANNIE.

Dog lice are long, black, creeping insects that seem to live only on dogs. They occasion great itching and irritation and are worse on long-haired than on smooth-coated dogs. Here is a good remedy: Mix four ounces of unslaked lime in a quart of water, mixed well together until a creamy substance; when cool, apply to the dog and let it stay on for ten minutes, then wash off. Persian powder rubbed into the hair, and a good wash with soap and water will be equally effective.

Fleas on cats can be destroyed by the liberal use of Persian insect powder dusted in the fur three times a week. Change the cat's bed frequently and destroy with boiling water any of the insects which may be thereon.

Avoid the use of carbolic acid upon dog or cat, as both are sensitive to its poisonous effects.

CHAPTER XI.

DISEASES OF DOGS AND CATS—*Continued.*

DISEASES OF THE ORGANS OF SPECIAL SENSE.

AURICULAR CATARRH.—A disease of the ear frequently associated with eczema. Frequent in long-eared dogs.

Symptoms.—First is noticed a scratching of the ear, the diseased ear is carried lowest in traveling, frequent shaking of the head. Examination of the ear reveals inflamed condition of the interior, a discharge first watery, later becoming thicker and darker and very offensive.

Causes.—Injury to the ear, as from blows; the scratching induced by eczema or fleas may also be a cause, exposure to cold and wet, lack of exercise and improper feeding.

Treatment.—In early stages clean ear with *moist* sponge, after which drop into the ear from 4 to 6 drops of pure solution of peroxide of hydrogen, repeat twice daily. If the discharge is very offensive clean the ear twice daily with soft sponge moistened with ether, after which dust the ear well with the following powder: Take of boric acid 2 ounces, iodoform 4 drams. Mix. Apply enough to dust the ear twice daily.

GOT THE EARACHE.

SEROUS CYST OF EXTERNAL EAR.—*Symptoms.*—Apparent thickening of the flap of the ear which contains fluid and fluctuates upon pressure. May be hot and painful.

Cause.—Some violence to the ear, generally from excessive shaking of the head in cases of catarrh or from irritation of flies or fleas.

Treatment.—The contents of the cyst evacuated by opening the cavity freely at lowest point. Keep wound clean, and inject cavity twice daily with 5 per cent. creolin and water. Cover any raw edges which may appear with powdered burnt alum twice daily.

DISEASES OF THE EYE.

CONJUNCTIVITIS.—Inflammation of the mucous membrane of the eyelid.

Symptoms.—Vary from simple congested condition with great flow of tears to that of intense inflammation with catarrhal discharge of matter which tends to glue the eyelids together.

Cause.—A very common complication in distemper may result from direct injury to the eye or to the presence of foreign body in the eye.

Treatment—Examine for foreign body, if present remove it. Absolute cleanliness important; bathe with tepid water three times daily, after which apply with dropper few drops of following mixture: Take of boric acid 10 grains, distilled water 1 ounce. Mix. If suffering be great apply to eye a few drops of 5 per cent. solution of cocain.

KERATITIS.—Inflammation of the cornea or front covering of the eyeball.

Causes.—Injuries, also frequently as a complication of distemper.

Symptoms.—A more or less opaque condition of the cornea, milky color, may cover whole or part of the cornea, later may be ulceration with pit-like depression due to death of part of the cornea; this may amount to perforation.

Treatment.—Great cleanliness. Drop in the eye three times daily a few drops of the following solution: Sulphate of zinc 5 grains, distilled water 1 ounce. Once daily apply a drop or two of the following: Atropia sulphate 2 grains, mixed with 1 ounce distilled water.

DISEASES OF THE NERVOUS SYSTEM.

EPILEPSY.—Commonly known as fits. Frequently mistaken for rabies or hydrophobia. Epilepsy is common in both dog and cat, especially young animals.

Symptoms.—Sudden attack, trembling, staggering, falling finally, frothing at the mouth; may moan or cry. The spasms are of the whole body. Breathing irregular. Attacks last but a few minutes; when animal recovers seems puzzled as to what has happened to it. The cat is sometimes greatly exhausted and frequently has fits in rapid succession. After the attack in the dog it generally appears all right again.

Avoid exciting causes in epileptic animals, as fright or over-exertion. The predisposing causes are heredity, irregular exercise, overfeeding, acute febrile diseases, especially distemper, following which it is common. In rare cases the result of injuries to the head.

Treatment.—Avoid exciting causes. During the attack protect from those who would kill the animal as rabid. Ordinary smelling salts or dilute ammonia fumes applied to the nostrils carefully. In puppies and kittens troubled with worms treat as directed for worms. Give exercise, feed the fat animal more sparingly. If debilitated from distemper or other disease give good food and clean surroundings, with ample chance for exercise.

CHOREA, or ST. VITUS' DANCE.—Involuntary twitching movements of more or less of the muscles, the twitching generally with a regular rhythm, may be constant or intermittent and may go on while the animal sleeps. One hind leg the most commonly affected. Often incurable in animals over two years old. Commonly met with as a sequel of distemper. May be so slight as to be scarcely noticeable, or so bad as to prevent animal from walking.

Treatment.—Regular exercise in open air if possible, moderate but nutritious diet. For animals size of fox terriers give 2 drops Fowler's solution twice daily for 5 days, then increase each dose 1 drop each day until 12 drops are given at each dose; continue at this amount for 1 week, then decrease the dose 1 drop each day. Any swelling or undue redness of the eyelids indicates the remedy be discontinued until the eyes appear normal.

RABIES, HYDROPHOBIA, MAD DOG.—I do not say that there is not such a thing, but I do say that it is far less common than generally supposed and that hundreds of cases of mad dog are simply the manifestations of

some other disease. So great is the dread of hydrophobia that even slight derangements of the nervous system are mistaken for rabies and the dog is shot before it can be determined what really is the matter.

I do not feel justified in saying that hydrophobia does not exist, but I have never seen a so-called case that could not be explained on some other view than that of the introduction of a specific morbid virus. Although I have taken special pains to find a clear case of hydrophobia in the human subject, I have not yet succeeded.

Hydrophobia in the human subject appears to be, in most cases, a disease of the imagination. There are doubtless cases of blood-poisoning and lockjaw, such as may follow any wound in the flesh, caused by the bite of a dog, but not one of these cases out of a hundred is real hydrophobia. And when you hear of a mad dog having passed through the neighborhood, followed by a company of excited men with clubs, guns and pitchforks, of his having been killed after biting all the dogs he meets, of the bitten dogs having been sacrificed in consequence, just conclude that here was a poor dog that had lost his master and was running to find him, running until famished and tired out, irritated and angry at the cruelty shown him along the road, and probably not a case of rabies at all. And whatever you do, avoid joining in the mad and cruel chase of the poor, thirsty, hunted, unhappy dog.

In case one is bitten by a dog or a cat, whether supposed to be mad or not, the best thing you can do is to take a few vapor baths, as hot as you can bear them. The perspiration will eliminate any poison

that the bite may have introduced into your system. Then endeavor to forget all about it. If you follow this simple advice, the chances are incalculably great that you will be perfectly safe.

Rabies is a disease of the nervous system and is communicated through the saliva of the diseased animal which contains the virus or poison. It is far more common in Europe than in this country. The symptoms vary in different cases. First symptoms occur in from a few days to two months or even longer, but about six days is the most common period of incubation, as it is termed. In the dog two well-marked forms of rabies are recognized; namely, the violent and the dumb form. The animal first becomes depressed, maybe morose, does not remain long in one place and wanders about or may hide in secluded places. Frequently the appetite becomes depraved at the start and the animal eats foreign bodies like straw and litter, coal and stones, while good food is refused. The period of depression lasts from a few hours to two days; then comes the stage of excitement; voice is noticeably altered, the voice is husky, the bark becomes a howl which is characteristic and peculiar to this disease. The animal is now liable to bite anything with which it comes in contact, yet may seem conscious in certain ways and may recognize a familiar voice at times. All sense of pain appears gone; will bite the red-hot end of a poker as readily as a stick of wood. Periods of excitement alternate with periods of depression. During the wild period the animal may wander great distances; after three to five days exhaustion becomes so pronounced the animal feels unable to rise.

The popular idea of the frothy mouth in cases of rabies is in error. The saliva is not very profuse as in epilepsy, but is more sticky and may hang from the mouth in strings. There is no fear of water; the animal will often try to drink, but is generally unable to lap the water or to swallow it on account of the paralysis of the tongue and throat.

In the dumb form of rabies the paralysis is decidedly marked. The lower jaw hangs down as if broken; the animal has a peculiar, haggard appearance from paralysis of facial muscles. In the dumb form death comes sooner than in the violent form.

Precautions.—Do not be too ready to handle dogs with any of above symptoms until sure of some explanation of the cause producing them.

Secure suspicious animals in tight enclosure. Do not kill until sufficient time has elapsed to make intelligent conclusion. Ten chances to one he was not mad, and by confining him in some tight place where he will be quiet and free from all excitements he will recover and thus relieve the mind of the one bitten. After he is shot it will be too late to determine what was the matter.

DISTEMPER.—A contagious and infectious disease of the dog and cat, usually attacking young animals and attended generally with more or less decided and serious complications of the internal organs and nervous system; also with complications of the organs of special sense, as of the eyes and ears. It may be communicated from cats to dogs, and vice versa. Once contracted the disease is sure to run its course and cannot be stopped by dosing with medicines.

Symptoms.—First is noticed a period of depression, appetite impaired, symptoms of catarrh, discharge from nose, sneezing or cough, loss of flesh marked and rapid, temperature elevated, 103°

to 106° F., eyes discharge, weakness pronounced, bowels apt to be either loose or constipated. In addition there may be present any of the symptoms already mentioned under diseases of the breathing or digestive organs, as well as the nervous complications noted under diseases of the nervous system.

Treatment.—As may be seen, the medical treatment is apt to be very complicated. If the animal is a valuable one it is advised that regular veterinary advice be secured in the treatment of the disease. Good care and nursing are about all the average person can do. Try to tempt the animal's appetite with nutritious and easily digested food, such as beef tea or mutton broth thickened with rice. The dog will frequently eat scraped raw beef thickened with gelatin when everything else is refused. If he will not eat, food must be forced down his throat three times a day, at least. Beef tea with raw egg mixed with it is good for this purpose. Place it in a quiet, warm, dry place. Many animals properly cared for make good recoveries without any of the attendant after-effects so much to be dreaded.

WOUNDS are of common occurrence, but as a rule heal readily if not too extensive. The principles underlying the successful treatment of wounds of all kinds are as follows :

Removal of foreign material from the wound; thorough cleansing of the wound with water; disinfection of the wound. Closing of the wound if necessary or advisable; bandaging in certain cases only. Applications of agents calculated to assist in healing.

In cleansing wounds a syringe is often required. In shallow wounds it may not be required. Foreign bodies may require special instruments for their removal; bullets and shot may at times be left in the animal without danger, when the removal might be dangerous. Such cases should have care of the surgeon.

Wounds may be disinfected by application of peroxide of hydrogen solution, full strength, or by creolin or lysol solution, 3 per cent. strength. Sewing or closing the wound with thread and needle had better be left to the experienced surgeon. Bandaging of at least a temporary kind can be devised by any skillful person.

Applications to wounds are many. Avoid any kind of grease, as it readily collects dirt and is objectionable on that account. Peroxide of hydrogen is suitable at almost all times and situations and is not poisonous. Powdered boric acid is an excellent application to sores which have started to heal. It can be applied to deep sores if dissolved in clean water and syringe used.

BROKEN BONES heal with surprising rapidity in both dog and cat, even when badly crushed, if the wound be properly treated and the bone placed in its proper position before the bandage and splints are applied. Of course, it is always best to entrust this kind of work to an experienced person.

To kill a dog or cat humanely, chloroform is the best method. At best it is an unpleasant job to kill a pet, and particularly so if he has been a companion for years, but often it is a kindness to put an old animal or a suffering one out of the way. Don't try poison. If the dog gets too much it will make him sick and vomit, and in any event, to witness the pain and agony is distressing.

To kill a dog place a piece of raw cotton in a towel. Lay the dog on his side with some one to hold him. Pour an ounce of chloroform on the cotton and put it to the dog's nose, with the towel wrapped around his head to keep the air away. You will have to hold him steady, or in his struggles he may get his nose away from the cotton.

To kill a cat, place it in a tight box with one ounce of good chloroform which has been poured on a soft rag. Let it remain five minutes or until it is perfectly quiet, then take it out and place head downward in a bucket of water until absolutely sure it is dead. It will be necessary to put weights on the box or the cat will get away.

To kill a wild cat that you cannot catch, get some skilled marksman to shoot it with a shotgun. Don't try killing it with single ball.

To kill young kittens, take them before their eyes are open and put them in a bucket half full of lukewarm water. Put another bucket of water as far as it will go down in the first. Never drown kittens in the presence of their mother and always leave her at least one.

CHAPTER XII.

PONIES, GOATS, SHEEP, ETC.

There has been a great deal of talk of the difficulty in keeping boys on the farm. One of the best ways to do it is to give them some stock of their own to raise and reap the profit from. I know of several boys who have trained young steers, starting with them when calves and developing them on to steady and sturdy

FAST FRIENDS.

oxen. It takes a manly boy to train a yoke of oxen, and he may well be pleased with his success.

A lamb makes a pleasant pet when it is little, but as it gets older it is apt to prove a nuisance. The temptation to tease a lamb is great, and ram lambs particularly are apt to develop butting traits which compel their owner to banish them back to the flock

or otherwise dispose of them. If gently trained a sheep will do the work of a goat in pulling a cart around, and he will be equally useful in running a little power to churn or wash with. Bottle-fed lambs become very tame and will follow their foster-parents around with the patience of a dog.

While a pig is not usually considered a desirable companion, I know of nothing more pleasing than a round, sly little grunter. The pig is not naturally a dirty animal, and if given half a chance he will keep himself as clean as a dog. Nor are pigs as stupid as they are generally considered. They have capabilities in the educational line, as is shown by the educated trick pigs, once more common than at present. The great disadvantage of making pets of sheep and pigs is the fact that the butcher's knife is usually their destined end, and it makes one feel like a cannibal to have an animal you are attached to slaughtered and eaten.

Goats make first-rate companions for little people, provided they are not cross and unruly. They must be taken and trained as kids, and must never be teased. A cross goat can seriously hurt children and even larger folks. Kids are not very expensive and can usually be found in plenty in the suburbs of all our large cities. Almost any handy boy can rig up a suitable wagon, and there are plenty of old straps and buckles around the stable to make a harness. A boy who can manage a goat, however, soon aspires to a pony.

OUT FOR A RIDE.

Shetland, Iceland and other ponies are now raised in this country in increasing numbers. They bring nearly as much as the average horse, and in some cases more; and while they are small it should be remembered they have strength and speed, and their management and care should not be committed to young or inexperienced children. For young children a donkey or burro is often more suited; he is not apt to run away or do anything violent, and is patient and kind under treatment that would send a spirited pony flying. He usually has a will of his own, however, and when he thinks he has gone far enough he is apt to turn around for home.

Where ponies are not available, let the boy, if he is old enough, have a colt for his own. Let him under-

take its care, and if possible its training—notice I do not say “breaking”—and it will be one of the strong-

ONE OF HIS FAVORITES.

est ties to bind him to the farm. Give the girl a heifer calf and let her have its increase, care for it, milk it, set and skim the milk, make the butter and have every penny she makes in this way

for her own. She will be a stronger, healthier young woman, with a warm spot in her heart for the farm and all that it contains.

THREE BEAUTIES.

CHAPTER XIII.

RABBITS.

The important points for success with rabbits are cleanliness, dryness, plenty of fresh air without draughts, as even a temperature as can be given, and careful feeding at regular times.—Tim.

Rabbits stand first in the affection of many young people. Their gentleness, harmlessness and the cheapness of their food-supply make them particularly suitable for children, especially in towns and villages. While domesticated, rabbits will show the instincts of their wild brothers if the chance is offered and they are allowed freedom at large; yet they stand hutch and yard life, constant confinement, and a life where they never touch the ground, and thrive and multiply as well as in their natural haunts.

Every boy or girl, man or woman, farmer or mechanic, can turn a good many profitable dollars over yearly by keeping a few rabbits, either for market, pets, or exhibition.

Rabbits are remarkably prolific. They breed when from four to six months old, producing six to ten litters a year, and from five to twelve little ones in a litter. It is well to destroy all over six. The breeder

who is after fine, healthy stock does not breed his does until they are eight months old and limits them to four litters a year, preferably two in the spring and two in the fall. Fresh-cut hay or straw should be given the doe for her nest a week or two before she needs it. She will line the nest with fur from her body. The young are born helpless and blind and are naked. In about a week their eyes will open; in five to seven weeks they will leave the mother and shift for themselves. Clean out the nest after the young ones have left it. When three months old the sexes should be separated.

The proper way to lift a rabbit is to take it by the ears with one hand and support its body with the other hand under it. Or, in the case of the heavy breeds, and particularly with young rabbits, grasp a full handful of the skin right over the shoulders and hold it out from the body. A rabbit's sole means of defense is to

LOP-EARED.

kick with its hind legs, and a kick from a big, vigorous buck is not to be despised. They can usually whip a cat and give a small dog all he cares for.

Rabbits will thrive on anything a sheep will eat, but they like a variety. Keep nice clover or timothy hay and oats before them all the time. Every morning or noon give them a drink of clean, cool water. It is cruel to deprive them of this, as some breeders do, while if they do not get it a great many quench their thirst by drinking their urine. Fresh clover, dock, plantain, grass, dandelion leaves, are amongst the

most common grasses in summer months, but avoid feeding it with dew or rain on as you would poison; always cut and allow it to dry out for an hour or so until all trace of dampness has disappeared. Turnips and carrots in winter, together with dry hay, oats, steamed clover dried out with bran, apples, etc., make a good ration. Cabbage and turnip-tops make foul-smelling hutches and the leaves harbor insects. Carrots seem to be most liked. A mash of one-third linseed meal, with one-third wheat bran and the other corn-meal, well mixed and salted, makes a good conditioner and the rabbits eat it greedily. Mix it well with boiling water until it is a crumbly mass, not sloppy, then form into balls the size of a walnut and give each rabbit one.

Never feed any more green stuff or perishable food than will be eaten up clean. A piece of rock salt should be kept in the pen constantly.

I have heard that a nursing doe relishes and is less liable to eat her newly-born young if a piece of fat salt pork is given her, say two inches square.

A FAMOUS CALIFORNIA
BELGIAN HARE DOE.

Where young or old contemplate starting with rabbits, I would recommend purchasing a pair of the best to be had at a moderate price of the breed they have selected. When the business on this small scale has been mastered, it will be time to take up other varieties and to widen the field.

There are a dozen or more varieties of rabbits bred as pets. Some of them are eaten, but for my-

self, I would as soon think of eating Harriet's cat, Solomon, as eating some pink-eyed, white-furred bunny. Of late years Belgian and Flemish hares have been introduced as edible varieties, and there is said to be considerable profit in raising them for market. Those interested should get some of the many books written on the subject and study up.

The BELGIAN hare is a long, lithesome animal, with a long, narrow head, and ears about five inches long, set close together. The fore legs are about eight inches long; the hind legs large and powerful. Their

BELGIAN HARE
BUCK.

eyes are hazel in color and prominent. The color is a brownish-red or golden tan, with white on the belly and under the tail. The legs should be free from white—in fact, the less white there is the better. The feet should be a deep red. At four months of age the Belgian molts his first hair and gets a permanent coat, which is apt to grow in darker as he gets older. As I write this there is a great craze over the Belgian hare. Large numbers have been imported at fancy prices, and numbers of people have gone into the business of raising hares for market. While I have had no experience in the matter, I fear that the supposed demand for rabbit meat has been largely overestimated. The Belgian hare will weigh from ten to fourteen pounds. At five months they should weigh about five pounds, and this is the right age for dressing for market purposes.

The FLEMISH GIANT is a native of Flanders and is extensively bred there as a meat product. It has a large, chubby head, strong jaws, and a big mouth.

The ears are from six to seven inches long and erect; the eyes are dark brown; the fur is dark steel gray with dark ticking on the end of each hair. They will weigh from twelve to fifteen pounds, having large shoulders and massive hind quarters with a wide and deep body. They are fair breeders and are quite prolific and hardy.

YOUNG FLEMISH GIANTS.

The LOP-EARED rabbit is a big fellow, often weighing eighteen pounds, with long lop ears, often a foot or more in length. For many years they were the most popular fancy breed. By years of close breeding and confinement they have become what might be termed a hot-house variety. They sometimes weigh as much as sixteen pounds and specimens of eighteen pounds have been recorded. (See illustration, page 88.) They come in black, white, gray, fawn, and yellow, and combination of these colors with white. They need a mild temperature in winter and require close attention for successful breeding.

HIMALAYAN RABBITS.

The HIMALAYAN rabbit is one of the most beautifully marked; his fur has been called "mock ermine." He has soft, short, white fur, with the ears, nose, feet and tail a dark brownish-black, and pink eyes. Where only one breed is kept and another is wished for, I recommend the Himalayan. They are hardy and weigh from five to seven pounds.

The ANGORA rabbit has long, fleecy wool. The white ones are most popular, but there are other colors. They weigh five to six pounds. Care should be taken to keep them dry and clean and their wool free from knots and dirt. This will be found to be a difficult matter and makes this variety undesirable on this account.

The DUTCH rabbit is one of the smaller varieties and weighs five or six pounds. It is usually prolific.

DUTCH RABBITS.

They are colored as to the lop-eared, but have a distinctive collar of white around the neck and a white blaze on the nose. The ears are short and stand erect.

They make the best mothers and are often used as foster-mothers for other less hardy varieties. In the illustration the white band around the shoulders is rather wider than is now popular with this variety. As fashion has it now, this should cover only the neck and toes.

The WHITE ENGLISH or POLISH rabbit is all white, with pink eyes. They are always popular, particularly at Easter-time, when large numbers are sold in the city pet-stores. They are poor breeders and inattentive mothers and only suited as carefully tended pets.

There are several other varieties sometimes to be seen in this country, but they are so rarely seen that no description need be given them.

CHAPTER XIV.

RABBIT HUTCHES AND RABBIT DISEASES.

Many sudden deaths and ailments can be traced directly to dirty hutches and feed allowed to be trampled on, then eaten.—Tim.

No matter if the stock is reared in outdoor or indoor hutches, or pens on the ground, provide dry quarters and build in a spot where the sun will not overheat, or build a double roof on your hutches with a six- or eight-inch air space (open at ends) to allow a free circulation of air between the roofing, which insures the lower roof from becoming too warm. Wet hutches, or ones allowed to let in the storms, will cause disease sooner or later, so that it is very essential to provide a curtain, perforated board, or some such cover for outside hutches, to guard against the elements. The accompanying illustration of hutches will give the beginner some idea of a cheap start. Fig. 1 shows a single hutch for a doe. *A* is the sliding partition. *B* is door to nesting-box. Try to give all the floor-space possible to your pets—six feet long, two feet wide, and eighteen inches or two feet high (never less than eighteen inches) gives ample room; but then, in securing packing-cases and such, one cannot always get the desired shape or size. Three feet square, or three feet

FIG. 1.

by four or five, is not unusual for dry-goods cases, and they answer the purpose until such a time when one feels confident enough and can afford more elaborate quarters, such as a regular rabbitry, or stacks of six or eight hutches. Fig. 2 shows a stack of four hutches. Two have wire netting and two wire bars. The netting is to be preferred.

FIG. 2.

See that all floors are tight, and where one hutch is set on another, put in a one- or two-inch block of wood to allow the air to pass between the roof of bottom and floor of top. The doors can be hinged or buttoned in place, while stout wire bars can be stuck in the door-frames one inch apart, or one-inch mesh chicken wire used; the latter is cheaper, more easily put in place, and is rat-proof. Where danger of dogs exists, a stouter and heavier quality can be used to resist their attacks. Never use two-inch or larger mesh. Rats will play havoc with the young, and the young themselves can crawl through it.

Have all water and feed tins secured in such a way that the rabbits cannot throw them around, and so they can be lifted out and cleaned.

In the use of outside hutches, such as the "Morant," shown in Fig. 3, care must be exercised that the roof is securely fastened against wind and dogs. These hutches have wire netting for the bottoms, and in that way are moved every day so as to give the flock fresh grass. They are six feet long, two feet wide, one foot ten inches high at the front and thirteen inches at the

FIG. 3.

back. They can be made with a center partition or not, as desired. With it two rabbits can be housed, or a doe and her young, the partition being withdrawn until the young are old enough to wean, and then replaced so as to separate them, and give the mother a rest. Large rabbit hutches for raising rabbits on a commercial scale are described in the works relating to Belgian hare culture.

In the opening from the doe's hutch to her nesting compartment, never make a round hole for her to enter, but make an opening from the top of hutch to within four inches of the bottom, say eight inches wide; that insures the doe freedom from knocking her ears, as she would in passing through a round hole, and also insures all foul air being carried away. Nesting boxes can either be made by having a sliding partition, or else by a box which can be removed when the young commence to run around outside of their bed, and gives them more run in their gambols.

Any one intending to go into rabbit culture in a commercial way will, of course, study up the now very considerable literature on the subject, particularly that relating to the Belgian hare. Most of the books give instructions and plans of rabbitries.

Always avoid handling the young before they are old enough to stand it. A rabbit's loins are

WILD RABBITS.

very tender, and any unusual pressure is apt to cause internal trouble. See that no nails are exposed in the

hutches or sharp corners for the rabbits to hurt themselves on.

Wood shavings, such as are purchased and sold for bedding horses and cattle, make a much better bedding for rabbits than straw and hay. Sawdust is also a good absorbent; next to that I should prefer sand or dry road dust. All hutches should be thoroughly cleaned at least once a week, twice is better.

Only one doe and her young should be kept in one pen. The buck is quarrelsome and may kill even his own young, while the doe will also kill the young of another.

The life of a rabbit is from six to ten years. If they are kept in well-ventilated, warm and dry hutches and have a good run, so that they can have plenty of exercise, and are supplied with the proper food they are little liable to disease.

The common ailment is snuffles, resulting from draughts, dampness or from poor food and a general running down of the system. The symptoms are sneezing, with a discharge of white matter from the nose. It can be cured if taken in time, but if allowed to run will affect the lungs and internal organs, then it is hard to battle against, and generally ends in death.

Syringe the nostrils with boracic acid one part to four of water, twice a day, and after doing so rub a little Sanitas oil on the nostrils and legs so that the subject inhales the odor. Care should be taken against draughts and filth, and no green food to be fed unless a little carrot. Sweet spirits of niter, eight drops to a teaspoonful of water once a day, will assist vastly.

IN CANKER EAR, scurf forms inside the ear and makes the rabbit scratch the affected part and become ill if not attended to. A simple remedy is Goulard's extract, olive oil and turpentine, equal parts. Remove all scurf possible from inside of ear with a blunt smooth stick so as not to cause too much pain, then put in a teaspoonful of the above remedy after shaking the bottle well. Hold the ears until the oil penetrates to the root, then release the rabbit, who will immediately shake most of it out. Repeat once a day for a few days and a cure is certain.

SLOBBERS, another nasty complaint, is often seen in young and sometimes in old ones. Its symptoms are a running at the sides of the mouth of a watery fluid. Give twice daily a teaspoonful of milk or water, into which put 5 drops or 10 (according to age of rabbit) of equal parts of juniper and sweet spirits of niter—all well mixed together. Salt water is excellent for it, also swabbing the mouth with borax water.

When cold settles in eyes, wash twice daily with water 2 ounces, sulphate of zinc 4 grains, or water 2 ounces, boracic acid 4 grains.

DIARRHŒA or LOOSENESS.—A rabbit's excrement should always be round, hard, dry pellets; any sign of softness should receive prompt attention. When diarrhœa appears place the rabbit in a dry, warm hutch, with plenty of fresh air without draughts. Feed on dry food, such as crushed oats, dry bran, or mix a little oatmeal and peameal into a stiff paste. Exclude all green foods until the looseness disappears. Arrow-root mixed in cold water, then fed in such a quantity that the rabbit will take from a spoon, is a splendid

remedy and assists to sustain the afflicted one if it wats or not.

SCOURS.—This complaint is the most deadly of all; it is not so often seen as a common looseness of the bowels, but is the worst form of that complaint. If the rabbits are not taken in hand at once, scours will kill them in a few hours. Treat the same as for diarrhœa. Give fresh, cool water and sweet hay. The arrowroot treatment is excellent and checks where other remedies fail.

CONSTIPATION is not generally difficult to cure, as it is caused by an excess of food. The rabbit is seen to mope in the corner of the hutch, and refuse to eat, yet it seems often very thirsty. Feed green food, being careful not to cause the other extreme.

BELGIAN HARE BUCK.

COLIC—The animal is restless and seems in pain, while the body is more or less distended with wind. If this is caused by too much green food, cut off the supply at once, but when from lack of such and water, then feed sparingly. An English remedy is salt and water given in the drink. It is seldom colic appears unless from constipation.

FITS.—This is sometimes seen in both young and old stock. The head is drawn to one side, and the whites of eyes show a great deal, while the animal has difficulty in walking straight, and will often go round and round, finally falling down exhausted. Keep the rabbit warm and give the following pills:

Sulphate of iron	1 gr.
Extract of gentian	2 gr.

To make one pill.

Give these pill tonics twice daily and feed nourishingly. If it does not cure in a day or two, or no signs for the better have appeared, it is better to kill the rabbit, unless of value, when a stronger remedy may be tried: Give 4 grains of powdered camphor in 2 teaspoonfuls of tepid water every other day, if it is necessary to give for that length of time owing to no improvement showing. Should a change for the better start about the fourth day, then give camphor every third day until cured.

SORE HOCK is generally caused by filthy hutches, dampness, and sticks or slivers in their litter. Their continual stamping prevents the wounds from healing, while the damp filth will prove a continuous irritant.

Clean the hutch thoroughly, then whitewash, provide a good bed of hay or oat straw, wash the affected parts in warm water, dry thoroughly, apply carbolized vaseline; in an aggravated case put on a bandage, being sure to sew it on, not leaving any ends for the animal to nibble on.

When a rabbit seems inclined to sit quietly without paying attention to its food, try some stimulant to coax it. Tea leaves with the tea squeezed out, then mixed in the oats, are very good; onions make a fine tonic—a small one may be fed, or the greens from young onions. Flowers of sulphur, given in a pinch in the damped oats, often does a lot of good. A slice of toast sopped in lukewarm milk, just enough to make the toast wet, will coax the appetite. Common sweet spirits of niter, 8 drops to a teaspoonful of water once a day, acts well on the water and assists when a general running down is the cause of any ailment.

POINTERS.

Feed at regular hours, twice every day.

Don't feed your rabbits one day and starve them the next.

Pick out rank weeds and dry thistles from the hay when feeding.

Keep your stock cool in summer and warm in winter without artificial heat.

Feed a few tea leaves in the oats every few days; rabbits like them as a tonic.

Don't feed any succulent food of a doubtful nature, unless you know it is not poison.

Don't allow dogs or cats around the hutches. Be on the lookout for disease and rabbits off their feed.

See that all hutches are rat-proof. One-inch wire mesh will turn all enemies and keep the little ones in.

A good stock of carrots during the cold months is a great saving, and one of the best succulent foods.

Don't shout or make too much noise around the rabbits; the mothers may kill their young. Rabbits like quiet.

Give some boiled linseed meal with bran once a week; it improves the rabbit's condition and makes their coats glossy.

Talk to and pet the rabbits; they like those little attentions and will grow to watch for you and know their feeding hours.

When any illness appears, take the rabbit at once and separate from the others, to a good warm hutch with plenty of fresh air.

ENGLISH RABBIT WITH MIXED FAMILY

CHAPTER XV.

GUINEA-PIGS.

Don't pick a guinea-pig up by the tail or its eyes will drop out.—Tim.

Guinea-pigs are harmless, stupid, restless little animals with very few of the attractions of other pets. They show no affection for anybody, and will see their young torn to pieces before their eyes without showing any concern. Their advantages as pets are their ability to keep themselves clean, the fact that they are good at shifting for themselves, and that they are gentle and harmless for children to handle.

The guinea-pig is about half the size of the rabbit, with no neck to speak of and a head somewhat like a rat's; their legs are short, and they have no tail. Because they are called pigs they have the unpleasant names given those animals, the male being called a boar and the females sows.

There is an old superstition ENGLISH GUINEA-PIGS. that rats will not come where guinea-pigs are kept, and for this reason many pigeon and rabbit raisers keep one or two running around their lofts. I believe this is an error and that even this cannot be counted as one of their virtues. Rabbits and guinea-pigs get along amicably in the same hutch.

Guinea-pigs require about the same accommodations as rabbits, although their hutches can be smaller.

They will eat all the feeds rabbits are fond of, and as they have unlimited appetites they will eat away as long as there is anything in sight. The young ones will begin at once to eat the same food as the old ones. Guinea-pigs are particularly fond of oats and bran.

At present there are three varieties necessary to describe. The Common or English guinea-pig has a smooth coat and the color is black, white, bright red-

HIS FAVORITES.

dish brown, yellow and combination of these colors. When pigs are marked in this way they are called "broken" color.

The Abyssinian cavy is pure white and also broken colors, with pink eyes and with longer hair standing up in irregular ridges.

The Peruvian cavy is the Angora among guinea-pigs, his coat being extra long and silky, making this variety appear larger, although really not heavier than the others. The Peruvian cavy comes in some colors not to be found in other varieties, notably a plum color and also a straw color. They are also found in light tan and white and broken colors; black is very rare. This variety does not seem so greedy as the others. As in the case of all other long-haired pets, the Peruvian cavy needs constant care to keep its coat free from dirt and tangles.

CHAPTER XVI.

SQUIRRELS. RATS AND MICE.

Don't try taming an old squirrel; he is apt to be cross and never seems quite happy, whereas a young one taken from the nest or captured shortly after, makes an interesting and often affectionate pet. The most common of the tribe seen in captivity is the gray squirrel. He is a lively fellow, with bright, mischievous eyes and a happy disposition. The red squirrel is smaller, while the little ground squirrel,—“ground hackee” we called him when I was a boy, or chipmunk,—though not often seen in captivity, is as pretty and spry as any of them. The black squirrel is rare. In the Southern States the flying squirrel is quite common; he sleeps in the daytime and exercises at night. Do not try to play with him during the day.

The squirrel is so easily tamed that it seems a shame to keep him in confinement. If he lives in a tree near by, make his acquaintance by giving him corn or nuts, or some other delicacy, and he will soon come to eat from your hand. Be careful not to frighten him, and keep the dogs away. He will gambol over the fences and sit and scold if his accustomed tidbit is not forthcoming, and may even venture into your pocket for it. I have a stick ten feet or more long, reaching from a nearby tree to a second-story window,

and over this shaky bridge the little fellows come tumbling for their morning treat. In their natural state squirrels hibernate or sleep during the winter season, only venturing out on very warm winter days.

If you must keep your pet in captivity one of the pleasantest cages is an unused room in the barn or shed or woodshed. Here you can fit up a good-sized tree with branches and a cozy box or hollow gourd for a nest. Keep the outside woodwork covered with wire netting, or your pet will soon nibble his way out. The floor should be covered with dry sand, and in the corner a box of woods earth should be provided where

they can bury their nuts. The sand should be cleaned out frequently, for although the squirrel is naturally a clean animal, his quarters, if not cared for, will

soon get an unpleasant odor. For this reason it is better to have a tin cage in case you cannot have a room as described, and by all means have a cage with sleeping and eating compartments and a revolving wheel. Round and round the little captive will make it go for an hour at a time, and it will go far towards keeping him in good health, an amount of exercise being absolutely necessary for the well-being of this one of the most agile and active of animals. Have the bottom arranged with a tray so that it can be removed and easily cleaned. Provide hay, dry moss, or raw white cotton for a nest.

Young squirrels should be fed stale bread and milk and soaked corn; when they have reached maturity give them all kinds of nuts, acorns, corn, pumpkin

seeds, sunflower seeds, a hard biscuit once in a while. Like other rodents, such as rats and mice, they have two front teeth, incisors, on each jaw; these are flat and the upper and lower ones play together like two chisels and mutually keep each other sharp. As they wear away by eating hard nuts, which are necessary for them, the teeth grow out so that they are always about the same length. If one should get broken out, the corresponding one in the other jaw must be pulled; otherwise not having a tooth to work against it will grow long and soon prevent the animal from eating, eventually starving it to death.

White mice are a little smaller than the common brown house-mouse. They are subject to few diseases, and many a boy has started on his petward career with these little pink and white fellows. In addition to white mice there are plum, fawn, and other shades, these colors mixed with white. White mice may be crossed with other colors of fancy mice or with the house-mouse.

If the cage, which preferably should be of wire, is kept clean, washed at least three times a week with carbolic soap, and the floor kept covered with dry sand or sawdust, or both, and renewed frequently, and they are fed the proper food, it is said there will be none of that mousy smell which is so disagreeable to many people, but the great objection to mice is the difficulty in keeping their cages clean.

. Keep mice where they and their home will be dry. This is most important. Be careful not to feed fresh bread or fresh corn or wheat; it frequently kills them. Give them stale biscuit or bread soaked in milk, oats

and cereals, canary seed, acorns and nuts and occasionally a little hemp seed. Don't feed meat, cheese or cake. A stale loaf of bread put in the cage will give them pleasure, as they will burrow all through it, making snug little nests and passage-ways. Let it remain two or three days, then put in another. Have earthenware pans in which to feed, and wash them out daily.

Mice may be bred when they are ten weeks old. Have a separate nest for each mother, and the nest filled with white, raw cotton. In about twelve days

JAPANESE RATS.

she will bring forth her little ones, and in two weeks they will be ready to leave her and shift for themselves. Put them in a separate cage, destroying all or part of

your mates, as they are not appreciated unless for trick mice. They breed so prolifically, you will have to dispose of your surplus stock promptly. Don't overcrowd your cage.

Both mice and rats are capable of being taught many pleasing tricks, if the necessary time and patience is given to their training, and they are both cleanly animals if they have the chance of keeping clean.

CHAPTER XVII.

OTHER PETS.

An old friend in Chester County, Pa., has a pet fox which is quite tame and which he has trained to perform a number of tricks. He is kept chained and has his home in a box which has no bottom but rests on the ground. He is fed just as a dog would be, and it is perhaps needless to add, he is very fond of chicken.

When well fed and cared for, and especially when young, the raccoon or "coon" becomes thoroughly domesticated and seems to lose all desire for his woodland home. He will play with the children, frolic with the

VISITORS TO THE TAME FOX.

dogs and follow his master around everywhere. Give him a comfortable home in a box, keg or barrel placed in a sheltered corner of the woodshed. He will eat anything and everything from the table and will drink milk and coffee, too, if he can get it. A tub of water in which he can splash and play will afford him lots of pleasure. You will find he is intelligent and he soon learns to pull a cork from a bottle, to open a door and many other accomplishments. He should never be teased. A young friend of mine had two, both of

which showed the greatest fondness for him, but having been teased by some dogs and boys, one of them flew at him one day and it was with difficulty that he could defend himself from its sharp teeth and claws. As they grow older they are apt to get savage and are not to be trusted. They should then be either chained up or kept in a cage, or, better yet, disposed of.

THE PET
COON.

The opossum is not nearly so nimble and interesting as the coon, but his wits are sharp as well as his teeth, and he is full of cunning. They sleep during the day and prowl at night, and for this reason are not especially attractive pets, and, too, they are apt to be sullen and intractable. One I knew of never got over the habit of "playing possum," and even when his owner grew tired of him and carried him out to the woods to let him go, he "played possum" as he was rolled out of the basket, and lay perfectly still until he was sure he was quite alone, when he scampered away. They will eat anything, meat, vegetables, insects and fruits, and in the fall they get fat as butter.

The best way to tie up both the coon and possum is to put a collar round their necks and fasten this with a light but strong chain to a ring which slides up and down a pole. It will afford them exercise and much amusement climbing up and down. They should have a box or barrel either on the pole or at the bottom for shelter.

THE SLY FOX.

Some time ago on a visit to the island of Nantucket, off the coast of Massachusetts, I saw a whole field covered with little hills and undermined with the homes of prairie dogs that had been brought there as pets. The prairie dog, if taken young, is a lively little pet, fond of attention and as tame as a kitten. He will be happier if given a home under the porch where he can burrow out a nest. His diet is entirely

PRAIRIE DOGS.

a vegetable one, grass, roots, seeds and nuts. He is a neat, clean little fellow, nice to have about the home, and all in all a pleasant pet; only be careful, if you have a pair of them, that they do not propagate and overrun the dooryard or neighboring field.

The woodchuck or groundhog is sometimes tamed and, though a clumsy and heavy fellow, he is not without his good points. He lives on a vegetable diet altogether, burrows in the ground for his home, and sleeps during the winter's cold. One I knew, when a boy, had his abode in a culvert, under the road not far from our front porch, to which he would come regularly to sit up and beg for peanuts. He was an inoffensive fellow, and much esteemed, so that his untimely death by a strange, big dog was mourned by all. With the exception of the peanuts and now and then a cracker, he found his own fare.

No pet is prettier, with his glossy black and white coat and bushy tail, than the common skunk or polecat. If the peculiar gland in which is secreted the unpleasantly odorous fluid is removed by a veterina-

rian, he is almost without a fault as an interesting and uncommon pet. Even if this gland should remain, and he is not worried or teased, there is but little chance of his making himself unpleasant; get a kitten, however, don't try taming an old one.

I have heard of one riding round in his owner's pocket, following him like a dog, and having great sport catching grasshoppers when they went to walk. He eats all kinds of insects, grubs and ground moles, and he will keep the house clear of mice, and, by the way, look out for the chickens, big and little.

Ferrets are hardly considered safe pets for young folks. If not carefully handled when young, they are

TWO PRETTY PETS.

cross and of uncertain temper. They are kept mainly by professional ratkillers, who use them to drive rats out of infested buildings. The ferret's body is very long and slim, so that he can slip in and through the rat-holes and runways. A pair of ferrets will clear out a barn in short order, the rats scenting danger and flying in every direction. They will kill every rat they can catch.

It is sometimes difficult to recover the ferret, as he will gorge himself with blood, and then, getting sluggish, will seek some quiet place for a nap and rest. Ferrets will live in a box, with proper slats, and should be fed, morning and evening, on bread and milk, with fresh meat occasionally.

CHAPTER XVIII.

PIGEONS.

Pigeons, as pets, are desirable for several reasons. There are many varieties, having quite distinct marks and characteristics, which afford a wide range for choice to suit different tastes. They appear to have greater intelligence than other birds, and in many respects have habits and traits that are very human. If their owner is of an acquisitive turn it is possible at any time to convert the birds into cash in hand.

The old saying, "Be sure to have your cage ready before you catch your bird," applies here. The "aviary," or "loft," is the first thing to consider when about to begin the keeping of

WHITE OWLS.

pigeons. The common practice of nailing boxes for these birds on the outside walls of barns and other outbuildings is not to be commended, as it gives the buildings an untidy appearance and the birds have at best a poor home and shelter. In such quarters they suffer great hardships in cold and stormy weather and are subject to the depredations of small owls. If left at liberty, as they must be in such cases, they fall a

prey to hawks and pot-hunters, and will do much damage in neighboring fields and gardens.

If an existing structure must be used, it is advisable to make a loft on the inside of the outer wall of such building, to which access can be gained at all times from the interior, holes being made in the wall with alighting boards at the bottom for the exit and entrance of the birds. An apartment six feet long, six feet high and four feet wide will readily accommodate

PIGEON HOUSE WITH OUTSIDE CAGE DIVIDED INTO COMPARTMENTS.

six pairs of birds. If they have their liberty, twice the number can be housed in such a loft. If they are to be confined a part or all of the time, an outside cage or fly, fully as large or larger, should be constructed on the outside of the building. This may be made of light timbers, and covered with poultry netting. Needless to say, it should be neatly constructed, so that it will not disfigure the building, and it will be well to have a floor in it, and a roof over half of it, and numerous perches, so that the birds can enjoy the air and exercise without too much exposure. If a carpenter were to build this loft and fly at the same time, he

would be likely to extend the floor timbers of both through the wall, bracing them on the inside, thus avoiding the need for outside braces.

On many accounts it is better to have the loft entirely separate from poultry houses, barns or any other building. The house illustrated in my Poultry Book, which is copied here and which was designed for squab breeding, can be reduced in size to adapt it to the requirements of any flock however small.

The cut represents a loft eight by sixteen feet, with an outside fly of the same dimensions, making the entire building sixteen feet square. The corner posts

are eight feet. It is intended to accommodate from forty to fifty pairs. In building it, posts are set firmly in the ground, extending two feet above, pans inverted over them to keep out rats and mice, and the sills nailed to the posts.

For a few pairs a small ornamental loft may be elevated on poles eight or ten feet above the ground, and a ladder used to gain access to it.

Pigeons breed in pairs, and once mated usually remain faithful to each other till death. Unmated birds of either sex may by their coquetry and intrigue break up the union and cause trouble. Care must therefore be taken to remove all unmated birds as soon as discovered.

Breeding in pairs as they do, a home must be provided for each family. To this home they become greatly attached, and the males will fight desperately

to keep it free from all intruders. In the height of the breeding season the hen will lay a second nest of

SWALLOWS.

eggs before the young ones are able to fly. For this reason two boxes, or two apartments, should be provided for each pair. These two apartments must be separated so that the young birds cannot get from one to the other, since they will, when hungry, seek the

parents while on the new nest and injure the eggs. A common method of providing nests is to build shelves on the side wall of the loft and divide these by partitions into alcoves and in these set earthen nest pans made expressly for pigeons and for sale at bird stores and by seedsmen. A cheaper way is to use small

store boxes in place of the earthen pans. Fig. 1 shows a box containing a single nest

FIG. 1.

DOUBLE PIGEON
NEST MADE OUT
OF SOAP BOX.

so made that the birds cannot perch on it. Two of these would be needed for each pair and should be placed adjacent. The shelves may be dispensed with, and double nests made from store boxes may be hung directly on the walls by means of hooks or nails.

For supplying water the common stone automatic fountains are satisfactory. This should be set on a small box or shelf and not on the floor. Pigeons are heavy drinkers, especially in the breeding season, and a bountiful supply of clean water should be provided at all times.

Like other birds, they take great pleasure in bathing, and if allowed to do so, will take a bath every day. This may be permitted in summer, but in winter it is well to restrict them to two baths a week. A shallow pan containing three or four inches of water will serve for a bathtub. It should be placed out in the fly and removed as soon as the birds have used it.

Open feed-troughs in a loft are quite as objectionable as open water vessels. The feed in them becomes foul and much of it is wasted. The self-feeding hopper shown in the accompanying illustration is one of the best that can be found. These hoppers can be made of starch or soap boxes, by any one handy with tools. The lid should be broad enough to cover completely the feed trough at the sides, and these troughs should be just broad enough to allow the birds to feed without permitting them to get in with their feet.

The floor of the loft should be kept reasonably clean and be strewn occasionally with fresh sand and gravel. Red gravel is the best, as it contains iron, the oxide of iron giving it its peculiar color. Pigeons will peck at clay and coal ashes, and also at weeds and grasses. They use these substances, probably, for medicinal purposes, as dogs eat grass and cats eat catnip.

The natural food of pigeons is grain and the seeds of grasses. They are fond of millet, clover seed and peas, and if allowed to fly when these crops are sown will prove very destructive. Hemp seed is to pigeons what candy is to children. A little may be given them on entering the loft to tame them.

For a steady diet the following is commended: Two parts whole corn, two parts wheat and one part buckwheat, all to be old, sound grain. Screenings to be economical should be purchased for one-fifth the price of good wheat. New grain is not good for the squabs. The corn should be a variety having small grains and should in no case be cracked.

In order to supply feed for the very young squabs it is well to keep equal parts of bran and cornmeal in self-feeding hoppers always before the breeders. Experience has proved that the old ones feed with greater regularity and fatten their young better when the whole grain is supplied at regular hours, three times a day, all they will eat up clean. They will not eat grain that is fouled, if they can avoid it, and should not be compelled to do so.

JACOBIN.

For side dishes they should have ground oyster-shells in a box or barrel lid where they can help themselves, and a bit of salt codfish tacked to the side of the loft by several nails, so they can peck at it, but not tear it down. Instead of the salt fish, a big lump of rock salt may be placed in a box on the floor of the loft. They are very fond of salt, and when furnished in this way cannot get more than is good for them.

The female pigeon lays two eggs and then both birds assist in hatching them. The hen sits all night and until about nine o'clock in the morning; the cock sits until about four o'clock in the afternoon. Both assist in feeding the squabs. If the hen lays again before the first brood is out of the nest, the cock will usually take entire charge of the young, besides doing

his share of incubation. The two eggs will usually hatch one male and one female.

Pigeon eggs hatch in sixteen or eighteen days. After the first few days the young ones grow with wonderful rapidity if the parents are supplied with proper food and do their duty.

A well-managed flock will raise, on an average, five pairs of squabs annually for every pair of birds it contains.

Pigeons in confinement require regular attention and intelligent care in order to do their best. They

COMMON WHITE PIGEONS IN OUTSIDE PEN MADE OF WIRE NETTING.

should be fed and watered at stated hours every day. All quick and violent motions by the attendant should be avoided. If a bird is to be caught it should be done in such a way as not to throw the whole flock into a tumult. Every possible means should be taken to tame the birds so that they may be pets in deed as well as in name.

Filth, lice and disease will always mar, to some extent, the pleasure of the pigeon keeper. To avoid the first, one perch should not be placed over another,

or birds will soil each other's plumage. Sawdust or sand, or both, should be freely used on the loft floor. The young need absorbents in their nests, and for this purpose sawdust or short cut hay may be used. While it is not in accordance with the usual advice found in books on pigeons, I do not think it advisable to clean nest box each time after the young ones have deserted it. Sprinkle well with insect powder, cover with absorbent and allow the parents to raise a second or even a third pair in it before cleaning. Never use in nests yellow pine or any other kind of sawdust that is full of resin. It should always be from seasoned lumber. Fine planer shavings is even better than sawdust.

The long pigeon louse torments the birds more or less at all seasons. They relieve themselves of these

JACOBSINS.

pests to a certain extent by the water bath, as fowls do by the dust bath. They may be aided in this matter by the free use of insect powder (finely ground pyrethrum roseum flowers and leaves).

It may be dusted in and on their nest boxes and blown in the loft through a dry powder gun while the birds are flying about. The red mites and other kinds of lice that infest poultry quarters sometimes get into the loft. These may be fought successfully with hot salted lime-wash, kerosene oil and insect powder combined. Fine stems of tobacco,

TUMBLER.

cut about six inches long, will help to keep lice out of the nest boxes.

Pigeons are subject to many diseases common to the feathered tribe. The keeper succeeds best who does his best to avoid the cause of disease. Some of the fancy varieties are rather tender and must be treated accordingly. In all cases draughts of air through cracks in the loft must be avoided, particularly when they strike birds on their perches at night. To avoid indigestion the feeding must be regular, and certain articles for which pigeons have a special liking, such as salt, hemp seed, peas, etc., should never be supplied in large quantities at one time, especially if they have been withheld for a considerable time. If they are not limited in quantity they will gorge themselves, with serious results.

Birds sometimes lose the power of flight. This may be due to a blow on the wing, but is frequently due to a scrofulous swelling of the joints. Such birds should be disposed of and never allowed to breed. It is rarely worth while to give such cases medical treatment.

What is called "going-light" causes more loss to the keeper of fancy pigeons than any other disease. This wasting away may be due in many instances to old age.

POUTERS.

When this is not the case it is in all probability a tubercular affection attacking in one case the bowels,

in another the lungs or the liver. It is advisable to remove such birds from the loft at once, as soon as the nature of their complaint is discovered.

The squabs are often affected with cankerous growth in the mouth and throat. If the parents are fed and watered as previously advised there will be little trouble from this complaint. Should the birds be valuable it may be worth while to make an effort to save them by removing the yellow cheesy matter by the use of a quill and applying burnt alum to the sores.

The choice of varieties is a matter of taste. For the novice it is best on some accounts to begin with the common pigeon, or at least with a variety that is hardy and requires no extra manipulation or care to rear, and no special skill to breed.

One of the hardiest of the family of fancy birds is the present race of Homers, or Antwerp Carriers. They

are very strong flyers, and can be trained to find their home when liberated when several hundred miles distant from it.

ANTWERP OR HOMING
PIGEONS.

The Magpie is a popular variety among those who keep pigeons for pets. It is thought to be of Tumbler origin. The plumage is pied, like the bird

from which it takes its name.

Archangels are very striking in appearance. Their plumage is a beautiful mixture of black, white and copper-bronze with a bright metallic luster.

Nuns are beautiful birds, having trim, neat bodies

and handsome plumage; the most popular marking being a white body with black head and black tail and flight feathers.

For aristocratic carriage and make-up, no variety excels the Pouter. They are distinguished by their peculiar habit of expanding the œsophagus to enormous proportions at their pleasure. (See illustration on page 119.) The English Pouter is a large bird, but there is a small variety called Pigmy Pouters.

Jacobins are small fancy pigeons marked by recurved feathers on the back of head and neck, forming a hood, and giving them a very unique appearance. See illustration on page 118.

Turbits have a crest on the head and a frill on the breast; Owls lack the crest, but otherwise are much like them. (See illustration on page 111.) In this class are Turbiteens, Satinettes, and Blondinettes.

SHORT-FACED TUMBLERS.

The Tumbler is an interesting variety that should not be overlooked in making a selection. It is named from its habit of tumbling while on the wing. There is one kind, called Inside or Parlor Tumblers, that can scarcely rise above the ground without performing a somersault.

FANTAIL.

One of the first to attract the attention of a youth or beginner is the Fantail, the white being the most striking in appearance.

Runts are very large birds, resembling in shape and color the common barn pigeon. They are not good breeders, but are sometimes used to cross on common and Homing pigeons to increase the size when rearing squabs for market.

This list includes only the most familiar, and omits a large number of less-known varieties.

The usual method of training Homers is to take the young birds, after they are thoroughly familiar with their neighborhood, about a half mile from home and release them all at one time. This should be done on a clear day, in the morning, before feeding time. They will immediately seek their loft. The next day go as far in the opposite direction. Keep this up, gradually increasing the distance. Many birds are lost in training, but the weakest and poorest are thus weeded out.

In starting a loft of Homers it is necessary to begin with young birds, as old ones will immediately seek their old home. Homers should not be allowed to fly free except on an empty stomach. They will then seek their loft with a keen appetite.

In lofts where Homers are trained there should be a small area or cage at the entrance, either outside or inside, so arranged that the birds can enter easily, but cannot escape until liberated. The usual method of doing this is by the use of bent wires hung loosely in staples driven into the top of entrance. The bird soon learns to push them inward as it enters, but a lath across the bottom prevents their swinging outward. The contrivance is illustrated by the cut.

CHAPTER XIX.

BANTAMS.

Bantams are the pigmies of the poultry yard. Nearly all varieties of fowls recognized by poultrymen have their dwarf counterparts. In recent years the breeding of these diminutive fowls has become a popular pastime, and, incidentally, helped to expand the pocketbooks of those who have offered choice stock for sale.

Bantams are well suited for pets. They are small and appeal to the sympathies and affections of their owners; they require only inexpensive houses and yards, and if left to run at large do little damage. The love of the beautiful is satisfied, also, in their rich and handsomely marked plumage and graceful shapes. In the matter of profit they compare favorably with their larger relatives. A bantam hen of any given variety will lay about the same number of eggs as a hen of the corresponding larger breed, and in most cases the eggs of the bantam will be larger in proportion to her weight of body than those of the larger hen.

LIGHT BRAHMA BANTAMS.

Houses for bantams may be very plain and inexpensive or elaborate and costly to suit their owner's taste and purse. Large dry-goods boxes can easily be

reconstructed in such a way as to accommodate a small flock. The illustration shows a portable house made in this way. The netting door is divided so that the top of it may be opened by the attendant, and feed and water put in the run without entering or letting the chicks out.

DRY-GOODS BOX
BANTAM HOUSE.

The whole structure should be made so that it can easily be moved about by two persons of ordinary strength.

The usual poultry house models may be cut down in size to adapt them to their smaller occupants. But in all cases where the soil of the locality is not dry and porous it is well to have board floors in the house and to elevate the floor a foot or more above the ground. The space underneath, if properly enclosed, may be used as a winter or rainy-day run for the birds.

A neat, cheap and practical house, owned by a young and successful bantam breeder, is illustrated on this page. In dimensions it is three by six feet on the ground, three feet high in the rear and thirty inches in the front. The floor is twelve inches from the ground and the space underneath is used for a run. The illustration shows how the birds gain an entrance. The owner has access through doors and windows in the rear wall. The house is divided in the

BANTAM HOUSE.
PAIR BUFF COCHIN BANTAMS.

middle and thus adapted to the use of two breeding pens. The nests are so located at the back that they can be reached with the arm without having to enter the house. Coops for bantam chicks should also have board floors covered with dry earth or short litter, as they are somewhat less hardy than their larger cousins, and dampness is one of their worst enemies. Filth is another foe to guard against. Their houses and coops must be kept clean if they are to be kept healthy, and their owner is to take pride and find pleasure in his pets. Lice, too, are deadly foes to these little birds. But as they are small and easily tamed and therefore easy to handle, there is no excuse for permitting these pests of the poultry tribe to get the upper hand.

The food that is best for bantams is the same as that required to keep ordinary fowls in good health and condition. They are omnivorous, eating almost anything that man or animal will eat and some others in addition. For their best development they should have bulky food like grass, cut hay, and vegetables, besides grain and animal food. It is a good practice to feed all their food in a dry state so far as possible, and avoid sloppy messes. Like other birds, their food is ground fine in the gizzard. They must therefore have grit in the form of ground shells, granulated rock, or common gravel. All these things must be fed in form and quantities suited to the size of the bird. It is needless to say that water is a necessity for these pets, but it should be said that pure, clean water is more important for them than for ordinary fowls.

Breeders of bantams aim to keep them as small in size as possible. Their weight should be about one-

fifth that of standard fowls, and if smaller, so much the better. If perfect in form they are rarely ever too small to suit the owner or exhibitor.

In breeding bantams with a view to keeping down their size, the smallest specimens, provided they are healthy and perfect in form, should always be chosen for breeders. And by smallest is not meant the lightest in weight, but such as have small frames, although they may be plump and hearty. It is commonly supposed that bantams are reduced in size by a starvation process, but this is not the case. In rearing the chicks

CORNER OF A BANTAM FARM.

it is wise to feed generously and keep them growing thriftily until matured. By this method of rearing some birds will be overgrown, but the smaller ones will be of better shape and have better plumage, and be healthier than those grown by the starvation plan.

The early maturing birds of a flock will generally be found to be the finest in bone and to have the smallest frame, and these are the ones to select for breeding, especially from the broods hatched in May and June. It is not advisable to hatch earlier than May, at least not until variable spring weather has passed.

As maturity can be hastened by natural conditions, the plan of hatching a part of the chicks in August and September may be wisely adopted. Birds hatched at this time are usually caught by the cool weather of autumn before they are fully feathered, and their growth is checked and maturity hastened in consequence. From these late hatches some of the best breeders for the next season will be obtained. It should be known, however, that the few eggs obtainable so late in the season are not as fertile as spring-laid eggs, and the young birds must have extra good care to pull them through the winter.

WHITE COCHIN BANTAMS.

To fix the dwarf habit of growth and fancy markings, bantam experts freely resort to inbreeding. Healthy stock will not be injured by this means, but it is well to draw the line at brothers and sisters and not breed from them.

The breeds of bantams recognized in the "American Standard" number fourteen, not including the Game. These are grouped in six classes: Seabrights, Rose-Combed, Booted, Cochins, Japanese and Polish.

Seabrights are the oldest and best known of all and are subdivided by the color of their plumage into Golden and Silver Seabrights. A cock of this variety is shown on the extreme left of the group on next page. They have hen tails, that is, there is an absence of the usual sickle feathers.

Rose-Comb Bantams may be regarded as dwarfs

of the Hamburg fowls. A specimen of the black variety is illustrated in the bird on the left of the tin-cup shown in the group. There is also a white variety of Rose-Comb.

A black-tailed, white Japanese cock is shown in the left center of the group. There are pure whites, pure blacks, and various other shades of these pretty little birds.

FIVE LEADING VARIETIES OF BANTAMS.

Of the Cochins, there are Buffs, shown at the right of the group, the Whites, the Blacks, and the Partridge Cochins. These all follow the markings of the larger birds. See illustration on page 127.

Of the Game class, the Black-Breasted Red is the most common and popular. A specimen cock is shown, perched on the edge of a pint-cup in the group. They are beautiful and stylish little pets, and put on all the pugnacious airs of their fighting relatives.

CHAPTER XX.

CANARIES.

Of the dozen or more varieties of canaries that breed in the Hartz Mountains of Germany, is usually seen in this country a bright, cheery, happy little yellow fellow, which, except when he is molting or sick, is in constant song. The excellency of his song is largely a matter of early education and training. The breeders place the young birds in a darkened room where they can hear some superior singer in an adjoining room, and often they are further instructed with the flute or other musical instrument.

Notwithstanding canaries have been bred in close confinement for many generations, they are an unusually healthy bird, and disease is nearly always the result of neglect or mismanagement. I give below six rules, which, if faithfully followed, should keep a bird in perfect health and song.

Keep the cage and all its appurtenances scrupulously clean. The perches when washed should be thoroughly dried before they are returned to the cage.

Keep fresh, pure water always before the bird.

Keep the bird out of draughts and in a room with an even temperature. A room highly heated in the daytime and cold at night is no place for a canary. Don't keep him in the kitchen; the steam is bad for him.

Keep the bottom of the cage sprinkled with sand or gravel.

Keep a cuttlefish where the bird can get at it.

Keep sugar, candy, figs, cakes and other delicacies away from the cage.

Feed a mixture composed of an equal quantity of canary seed, rape seed and millet. The best canary seed comes from Sicily. It should be bright and shiny and free from worms. Rape seed comes from Germany, while millet is grown in this country. This mixture should be the foundation for all feeding, but it is good to feed occasionally green stuffs like lettuce, cabbage, sweet apple, chickweed, watercress, marigold flowers, weed seeds, which the bird seems to relish, a head of ripened millet or clover, a hemp seed or two very occasionally, and for young birds and birds molting, egg paste is stimulating and strengthening. It is made as follows: Boil an egg one-half hour; then rub it down with a spoon until it is smooth; add an equal quantity of stale cracker or toast crumbs with a teaspoonful of pure cayenne pepper. Birds in full song do not require this food, but it might be given once a week, and it should form the principal food of young birds until they are able to crack canary and other seed.

Usually in the latter part of August your bird will begin to molt. It is nature's way of renewing his coat and getting ready for winter. It will last from four to six weeks, and birds rarely sing during this period. The danger is in catching cold. The bird should be fed generously during this trying period. The egg paste will be good for him, as well as grated

beet and carrot, with other green foods, and a little hemp seed will do no harm.

While birds in their natural state are particularly free from disease, in captivity they are subject to complaints caused by their confinement and improper care and food. I give here some of the most frequent troubles, with the symptom and simple remedy.

Diarrhœa is a common complaint, manifested by the watery condition of the droppings. Avoid green foods, keep the cage clean and the bird warm (70 degrees) and dry; put a rusty nail in the drinking water. Give the bird a lump of chalk to peck at, and feed the egg and cracker food without the pepper.

Asthma is usually the result of cold. The bird opens its beak and gasps for air. It wheezes and puffs itself out like a ball. Change the food. Give warm bread and milk every morning, with green foods twice a week, and hang a piece of raw salt pork covered with cayenne pepper in the cage.

Loss of voice is usually caused by overfeeding, a cold or too much singing. Try the raw bacon covered with cayenne pepper; also feed the egg paste, doubling the quantity of red pepper.

Constipation can best be relieved by feeding green foods more frequently. In continued cases put two or three drops of castor oil in the bird's mouth. Apoplexy is caused by too rich food. The bird may drop from the perch and appear as dead, in fact it may be dead. Try sprinkling with cold water to revive, then change the food.

If scale appears on the legs rub the feet and legs with a mixture of kerosene and olive oil. Look out

for lice. If a white cloth is thrown over the cage at night, you may find in the morning many tiny red insects. Dust Persian powder all over the cage and through the feathers of the bird.

Bare places on the head should be rubbed with a salve made of butter and sulphur.

Catarrh and colds are indicated by a ruffling of the feathers; beak often open and nostrils stopped up, under side of tongue becomes hardened. Keep out of draughts and feed the egg paste and increase the green foods.

Pulling the feathers may be caused by too rich food, which causes an irritation of the skin. Feed a plain diet.

I have often wondered why women who wanted work at home and young people who were fond of pets did not raise canaries. While it takes care and attention, as does everything else which is profitable, it is easily within the capabilities of almost everyone. In parts of Europe many households are engaged in raising and caring for these birds. It is said that considerably over one hundred thousand are imported into this country every year. One pair of canaries will raise several broods each year if permitted to do so. They should not be allowed to raise more than three hatches. Start with the very best stock you can afford; that is, the male a fine singer and the female a good color. The breeding cage should be at least ten inches wide by sixteen long and as many high. The bottom should have a drawer to hold the sand and gravel. Don't let the lice get a foothold, and they cannot do so if the cage is kept scrupulously clean. Place

the cage where it is to remain permanently, strictly out of all draughts, and preferably against the wall, with a sunny, cheerful outlook, and about seven feet high. Provide pieces of old mortar or ground oyster shells as material for the new egg shells. Half of a cocoanut shell makes a good nest, while raw cotton answers for the nest lining, but bird dealers sell packages of deer's hair for this purpose. Let the male hang in an adjoining cage until the birds are acquainted, then place him in the breeding cage. In a week after mating the hen will lay a small green egg, usually in the morning, and one each succeeding day until she sometimes has six. The first egg will hatch in thirteen days, and then one each day as they were laid. The female will do most of the incubation; the male may help occasionally. Don't bother the birds by displaying too much curiosity, particularly after the young are hatched.

One of the best feeds for the parent birds while they are mating and sitting and rearing their brood is the egg paste mentioned above, together with green foods. It is also excellent for the young birds. When the latter leave the nest put them in a separate cage, and preferably in a separate room, and feed the egg paste and also canary and rape seed soaked in warm water. Cornmeal mixed with hard-boiled egg is also recommended. The young males will soon try to sing, and when three months old their education should commence. While canaries sing naturally, the superior excellence of their song is partly a matter of training.

All birds in their natural state are usually free from disease.

Feed plain foods.

Give the bird a bath every day, except when molting, when he will refuse it.

Perches for a canary should never be less than seven-sixteenths of an inch in diameter.

Feed liberally; underfed birds may eat their eggs. Don't let old food accumulate; what is not eaten, throw out.

To catch a bird throw a handkerchief over it. Hold it very gently. Its bones are fine and small and easily broken.

The bird's claws should not get too long; hold him gently in the left hand, and with a sharp pair of scissors cut off the extra growth. Hold the toe up to the light so that you can see how far down the veins come. Be careful not to cut these.

BIRDS, KEEP AWAY!

CHAPTER XXI.

OTHER BIRDS.

"The secret of success with caged birds is to keep the water fresh and pure, and the cage and perches scrupulously clean."

My feeling about our native birds is that it is much better to make friends of them than caged pets. When I see some naturally happy and cheerful bird, like the cardinal, losing the brilliancy of its eye and plumage, and hopping incessantly back and forth in a narrow cage, I always feel like opening the door and letting it go.

We like to make friends with the birds at Elmwood, to have them about the house and yard, and it is astounding how many there are when one knows when and where to look for them. I have counted as many as sixty different varieties in the course of a year around Elmwood. Years ago, I had a big martin box built, with some thirty compartments in it, and every year since they have occupied it, coming about April 15th, and leaving when their brood is raised. What thousands of insects they eat in the course of the summer! Then we have wren boxes around, in the trees and on the porch-posts, and a box for the bluebirds. We have swallows at the barn and under the smoke-house eaves, with orioles, catbirds, song-sparrows,

MARTIN BOX.

flickers, flycatchers, thrushes, kingbirds, goldfinches, scarlet tanagers and many others, in the shrubbery and near-by woods. No one is allowed to disturb or frighten them.

I believe every boy and girl will get far more pleasure in locating the haunts of these feathered songsters, observing their different characteristics of flight and nest-building, and learning their natural songs and notes, than in keeping them behind prison bars. But if you must have a bird for a cage pet get it while it is young, just as it is about to leave the nest. An old bird, ten chances to one, will not sing, but will mope and pine for the freedom that once was his.

Song birds as pets may be roughly divided into two classes—those which have hard bills, like the Canary and Kentucky Cardinal, whose food is mainly seeds, grain, etc., and the long-billed birds, which eat mainly insects, worms, fruits and berries, of which the Mocking Bird is the type. Of our native seed-eating birds, sometimes seen caged, and valued both for their song and the beauty of their plumage, are the Goldfinch, Indigo Bunting, Bobolink or Reedbird, Cardinal Grosbeak or Kentucky Cardinal, Rose-Breasted Grosbeak (one of the most beautiful of birds), and the Nonpareil or Painted Bunting, a feathered beauty from the Southern States. These are all fed substantially as the canary, but to the fare of the larger birds should be added sunflower seeds, unhulled rice, ripe fruit and berries, and a meal bug occasionally. The egg paste mentioned in the last chapter is relished by almost all birds.

The native insect-eating “soft-billed” birds

usually kept and sold by bird dealers are the Mocking Bird, Brown Thrasher or Brown Thrush, Catbird, Scarlet Tanager, Baltimore Oriole, Orchard Oriole, Robin, etc. These are more difficult to care for and keep in health, for they must have food prepared so as to closely resemble their natural insect diet.

MOCKING BIRD AND
CAGE.

Food for soft-billed birds is put up and sold by bird stores under the name of mocking-bird food. There are various recipes for making this at home. A good one is as follows: One beef heart, cooked until it is thoroughly tender, the yolks of one dozen eggs, boiled for half an hour, one pound of water crackers; grate all until they are fine. Add to this one pound of split peas and one pound of hemp seed ground fine in an ordinary coffee mill. Thoroughly mix and add one-half pound of maw meal. A small quantity of fresh lard may be added to keep it moist. Put away in air-tight glass jars. When fed to mocking birds, this should be mixed with an equal quantity of grated raw carrot or mealy potatoes. Green food, as lettuce, chickweed, watercress, ripe berries, raisins, bits of apple, or even grass, will be relished, and meal bugs, insects, grasshoppers, spiders and ant eggs, which can be obtained of most bird dealers, are appreciated delicacies. Lean meat cut in thin strips like worms will be relished and may be fed in limited amounts. In their natural state these birds are all insect eaters, and this is one reason I deplore their being made captives. Our orchards and gardens need them so badly.

The diseases of caged birds are mainly due to neglect or improper food. It is far easier to keep them well than to cure them when sick. Constipation may be relieved by feeding fresh green stuff, insects and meal worms for a few days. For diarrhœa, caused probably by spoiled food or impure water, a change of diet is usually beneficial. A rusty nail placed in the drinking water is said to be a cure. Give plenty of good, pure water for drink and for the daily bath, feed intelligently, keep out of draughts, and above all, keep the cage clean and you will be reasonably sure of success.

TWO FRIENDS.

Parrots, one of the longest-lived pets, have been known to live a hundred years or more. There are over three hundred and fifty species, but comparatively few are desirable as cage pets or capable of talking. Be sure to buy a young bird—one that has been in captivity since leaving the nest. The variety to get is a matter of fancy and price. It is said parrots learn to talk better when confined in a cage than when allowed the freedom of the house or chained to a perch. Have the cage amply large. A round cage, twelve inches in diameter, will do for a small parrot, but sixteen inches is the proper size for a large bird.

Parrots are said to learn much quicker from a woman's voice. Having won the confidence of the bird by kind treatment, slow and gentle motions

about the cage, give the talking lesson late in the afternoon. Cover the cage with a cloth so that the attention of the bird will not be distracted; pronounce the words quietly and distinctly and make them glide into each other, making the sentence as smooth as possible. Never split a parrot's tongue; it is cruel and unnecessary; in fact, it often prevents them from articulating distinctly.

Keep plenty of sand and gravel in the cage. Give a plain diet with meat; fresh bread and greasy foods absolutely prohibited. Give cracked corn, sunflower seeds, a little hemp with one soft feed a day, consisting of stale bread soaked in milk, or rice which has had boiling water poured over it. Leave on the stove for ten minutes, then place in colander and pour cold water over. Hard-boiled eggs mixed with bread, a few peanuts, ripe fruit in moderation, a mealy potato, pieces of dry toast and Polly's cracker are all admissible.

Diarrhœa is the most common complaint. Put the parrot in a warm place. Give plain food, avoid water, fruits and green stuff. In severe cases, put four drops of paregoric in a teaspoonful of boiled milk; give this dose every three hours. A rusty nail in the drinking water acts as a precaution. For constipation, give five drops of castor oil with an equal amount of honey, twice a day. Anoint the vent with oil also. Constipation is apt to produce fits. Dip the bird in cold water to revive it. For asthma cut off the heating foods. If very ill give a paste made of boiled milk and flour with cayenne pepper. Keep bird in a warm place.

If the bird eats its feathers, it is in too small a cage, or the cage is not clean, or you have been feeding meat or greasy foods, or too much hemp seed. Give crushed corn, sunflower seed or padar. Give the bird cuttle fish and an ear of corn occasionally to play with, and an inch or two of sand in the bottom of the cage. Look out for insect pests. Rub insect powder all through the feathers in all parts of the body.

In addition to this list of our native birds, there are a score or more of birds imported—Linnets, Larks, Goldfinches, Chaffinches, Bullfinches, etc., etc., all of which may be obtained of bird dealers in the cities.

Owls make stupid pets, as they wink and blink in the daytime, and are most active at night when most young people are, or ought to be, asleep. Then, too, they are apt to be savage, and a nip from their powerful beaks is to be avoided.

The American Magpie in the Western States is very plentiful, and one must admit that his jaunty air and beautiful plumage are attractive. Some of them have acquired ability as linguists. When domesticated they become very tame and do not need to be confined; in fact, they frequently become too familiar. As a thief he is without a rival. Like the crow he will eat almost anything,—scraps of meat, bread and vegetables,—and what he does not need for one meal he will hide for another.

A crow makes an interesting pet, but sometimes a troublesome one. Taken just about the time he is ready to leave the nest, treated kindly and regularly fed, he soon becomes quite tame. We called ours

Jim, and at first we kept him in a cage, then we clipped the feathers of one wing so that he could not fly, but he soon grew so attached to us that when his feathers in time came in and he could fly as well as his wild brothers, he did not leave us. He roosted in a near-by pine tree and resisted all our efforts to bring him into the woodshed on cold and stormy nights. We boys would climb up and catch him after a great deal of trouble, and carry him to a warm perch in the shed, but the moment the door was open he would escape to his favorite tree.

The belief that the tongue of the crow should be split in order to make it talk, is an error. Jim could call "Hello" very plainly and use some other words, and one day we boys were nearly punished because Jim kept calling something like "old colored woman" while our neighbor's cook was hanging out the clothes. He did it so well, she, thinking it was we boys, came in and complained to mother.

JIM.

Jim would come flying and hopping to meet us when we came from school, sometimes with the tail of a mouse dangling from his throat, for he was a great mouser and would swallow the little ones whole, head first, and it would take him some time to work the mouse down his throat. We fed him scraps of all kinds from the table; meats, bread and vegetables, and he picked up the balance of his living in his own way. He was very inquisitive, mischievous, a great scold, and, worst of all, a thief. It never did to leave a pie or pudding on the window to cool, or Jim would be at it in a moment. Bright objects always attracted his

attention, and he had a secret hiding-place where he carried pieces of glass, bright pebbles, string, and, alas! mother's silver thimble. With all his faults, Jim was one of our favorites.

FOOT NOTES.

All caged birds need gravel. Don't overlook it. Sprinkle it freely in the bottom of the cage.

Make the holes of the wren box just as large as a twenty-five cent piece. The wren can get in, but the sparrows can't.

Have the cages large enough. For a mocking bird or a bird equally large, the cage should be not less than 16 x 24 x 24 inches.

A good way to get maggots for insect-eating birds is to obtain some fresh sheep's heads and put them in an open box or barrel, and let the flies deposit their eggs; after two or three days you will find hundreds of maggots rolling out. Put a couple of inches of bran or meal in the box or barrel, and the maggots will live in it.

Broken legs or wings had best be left to nature to heal. Take all perches out of the cage and put in soft flannel. A young friend's canary broke its leg, and after two or three ineffectual attempts to set it he took a pair of shears and cut it off just above the fracture. In a few days the bird was getting along very comfortably with one leg.

Meal worms are also greatly relished. Look in some old meal chest for worms to start with. Fill an old crock three-quarters full of old leather and bran and put in your worms, a hundred if you have found so many, and tie a woolen cloth over the mouth, wetting it occasionally with water. In a short time there should be thousands of worms. Feed a few at a time.

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