very decidedly. It became coarser in the pile, but it increased in length, strength and quantity. It became a combing wool of the finest kind, even with the breeds that were formerly classed as fine wools, and the average clip might be safely said to have doubled. It increased from about three to fully six pounds per fleece; so, while the English shepherd has gained by the increased excellence and increased demand for mutton, he cannot be said to have lost in the fleece.

### Farm Chores.

Chores embrace any job that can be found to do or that may be required to be done (after a day's work is done, say some) outside the routine of the farm, and may consist of milking the cows and feeding pigs and hens, and from the way the term is used, chores are a nuisance, something to be done as rapidly as possible, albeit a part of present-day farming.

Right here is where average methods of farming have the main leaks, by degrading the care of the live-stock to a chore, something to be done quickly, and, unless in the faithful worker, to be skimped if time presses.

The current use of the term by far too many farmers shows them to be possessed with the idea that between farming and stock-breeding there is a wide gulf—a gulf that is never narrowed by keeping stock and giving it chore methods of attention. Live stock must be kept to ensure continuance of soil fertility, but when we say kept, it must be given more than a bare existence.

The results of chore practices usually remain on the farm, yet many exhibits at local fairs, from horses to pigs, show the care of these animals to have been considered as chores, and their looks bear out lack of keep, although they were kept as the term is generally used.

The large farmer of the prairie, with an annual summer-fallow of a quarter section or more, does not condescend to consider the keeping of live stock as a necessary adjunct to his system of husbandry, although signs are not wanting to show that a system of agriculture without live stock is a very one-sided affair, although it is a question whether he would not be better without live stock altogether if it is only to be ranked as a chore.

The main cause for the detestation of chores is the fact that the time frequently taken to do them is generally stolen from the period which should be devoted to rest or recreation of some sort.

The very fact that such procedure is followed on any farm is evidence of one of two things, or both: First, the employer must be greedy and is seeking to take labor to which he is not entitled (that he in some cases does the work himself shows he is so blind as to cheat himself), or that he is not yet aware of the value of live stock, because he steals minutes for chores when he should allot hours to its attention. So long as he continues to conduct his live-stock operations under the name of chores, so long will he either lose outright or at the most will get only small returns when large should fall to his share. The sow that eats her pigs, the pot-bellied sow, the skim-milk-fed calf, the pigs which die from black teeth, the colt that scours badly, the hens that fall dead off the roost or are eaten alive there by lice, are generally kept under the chore regime. The chore farmer is often a dyspeptic, because of irregular sequence, cooking of variable quality; his diet, however, is seldom varied-choring gives no time for a garden or small-fruit patch. The old saying, and a true one, "What is worth doing at all is worth doing well," applies to farm practice as to everything else; therefore, live stock must be given a standing in the plan of farm work, for we may rest assured that neither scrub, grade or pure-bred will return dividends as long as the chore method of keeping it is adhered to. NOMAD.

## Swamp Fever.

Mare, eight years old, seems weak in hind parts. Sometimes when walking she staggers. When going through mud she often staggers with hind part till she locks one leg behind the other. Think maybe her stomach is not in good shape, as she does not eat or drink as heartily as she should. Don't think it is swamp fever, as she carries her ears up and appears lively. Understand she had swamp fever a few years ago. Have worked her very little since planting. R. C. W. Iowalta, Alta.

Ans.—A staggering or wobbling gait behind is a prominent symptom of so-called "swamp fever" of chronic type. The maie may continue to carry her ears up and appear lively for some time, and yet the disease germs may be actively at work in her system, and will eventually terminate her existence. Examine the mucous membrane of the mouth and under surface of the eyelids and see if it is of a whitish or very pale color, or, by comparing with a healthy horse, motice if the

### General Care of Sick Animals.

BY DR. C. D. M'GILLIVRAY, BINSCARTH, MAN.

Modern research and enlightened experience have alike proven that on the general care of the sick depends, to a great extent, the sequelæ of disease, thus the ingenuity and resourcefulness of the attendant should be directed towards improving the hygienic condition of his patients.

The first thing which should merit attention is the habitat or surroundings. Where possible, a good roomy box stall should be provided and isolated to a certain extent from other animals. It should also be well drained and ventilated. While avoiding all draughts, pure air and plenty of sunlight should be freely admitted. The temperature should be from 60° to 70° F. Especially should this be noted in cases affected with respiratory diseases, such as colds, throat and lung troubles. A comfortable bed greatly conduces to the recovery of the sick, therefore the litter or bedding should not be allowed to lie around saturated with urine and decomposing. All excretions should be frequently removed, especially during warm weather, on account of the flies which they attract.

The body of patients affected with febrile diseases should be clothed according to the seasonin summer a light kersey would be sufficient, but in winter a good heavy woolen-lined blanket should be provided. The legs should be well hand rubbed and rebandaged each morning and evening. Animals unable to maintain the standing attitude should not be allowed to remain recumbent in the same position too long, but should be assisted to regain their feet, and, if totally unable to get up, should be frequently turned from one side to the other, say every two hours. This is to prevent the formation of bed sores and congestion of internal organs, which always retards recovery. Cows affected with "milk fever" and in a comatose condition should be closely watched, as if allowed to remain recumbent in one position too long they will soon become tympanitic (bloated).

The dieting of patients is important, and should be consistently carried out. It is foolish to force food which is distasteful upon a sick animal with the suggestion that if "it does not like to take it, it can leave it.' to take it, it can leave it." All food should be clean and of the best quality. The food should not be allowed to lie in front of a patient from one meal to another, and if not promptly eaten up should be removed, and a fresh supply offered. Therefore, coax and entice a sick animal to eat by catering to its peculiarities of taste. preferable diet is that which is most nutritious and easily digestible, as green fodder, iresh-cut hay and oats, boiled or scalded oats and barley, bran mashes, linseed, roots, etc., any of which are easily obtained. Salt should also be provided, either in the food or placed conveniently in the feed box. Nauseous medicines should never be mixed with the feed, as it is foolish to expect an animal with impaired appetite to partake of food thus rendered unpalatable.

In the watering of patients, it is very seldom indeed that animals having free access to water will hurt themselves by drinking too freely, except when affected with such diseases as diarrhoa and diabetes. In these cases, water should be restricted. Cold water seldom does harm, and is especially beneficial in febrile affec-Cold water seldom does In winter, if stable is cold, it is advisable tions. to take the chill off the water. The condition of the bowels should be noted, and if torpid or constipated, a more laxative diet should be given, as bran mashes, to which may be added two or three ounces of sulphur or Epsom salts. When chills are present they should be combated by the application of mustard plaster to the sides or cloths wrung out of hot water. If breathing is difficult as result of respiratory affections, it is of great benefit to give inhalations of medicated steam, as by pouring hot water over bran or hay in a pail to which has been added a little turpentine or carbolic acid, and allowing the animal to inhale the vapor. While judicious exercise is of great benefit to the sick, violent exercise is always to be condemned; thus, in the case of horses suffering from coffe it is positively injurious to exercise violently, as by putting a boy on its back and galloping as is so often done; much better to leave colic cases to their own free will and let them roll about.

Exercise should be limited during the acute stages of disease, but gradually increased as the animal becomes convalescent.

Disi fee ion.—This would only be indicated where the animal has been suffering from some contagious disease, in which case the premises and stable sundries should be thoroughly disinfected. All litter and valueless articles should be burned. The floor and walls should be scraped and washed with soap and hot water and deenched with boiling water and then sprayed with some disinfectant, as a two per cent solution, of crude carbolic acid, creedin or zerodenin solution. Clothing such as blankets should be thoroughly bedeat

#### American Veterinary Medical Association Annual Meeting.

(From our own Correspondent.)

The fortieth annual meeting of the American Veterinary Medical Association was held in the City Hall, Ottawa, September 1st, 2nd, 3rd and 4th, where they were welcomed by Mayor Cook. This was the first meeting of the Association in Canada, and its success as regards the attendance and the value of the papers augurs well for the holding of future meetings in this country. In point of attendance it was fully up to previous average meetings, there being fully two hundred delegates present from all points in the United States and Canada. The association now has a membership of nearly 600. The best veterinarians on the continent attended, and in some of the papers matter of universal benefit was given. The statements of Dr. Salmon with regard to the communicability of human and bovine tuberculosis will at least give him wide notoriety as one anxious to refute in toto the theory of the world-famous Koch, even if all the results of his experiments are not considered by many as sufficient evidence on which to ground his conclu-

The President, Dr. S. Stewart, of Kansas City, in his address said that the object of the association was to uplift and improve the veterinary profession, by securing greater competency in the individual practitioners. To hasten this end was the object of holding such a conference as the one they were beginning. During the time of its existence the association had been instrumental in increasing the length of the college course required of practicing veterinarians, and had in this way raised the standard of the profession by making its members more thorough.

One of the pleasantest and most profitable features of the meeting was a

ures of the meeting was a

TRIP TO PINE GROVE STOCK FARM,

Rockland, arranged through the courtesy of Senator W. C. Edwards. As a progressive stock farm, with great numbers of excellent stock of various classes, it was of interest to the veterinarians, but the point of most particular interest was the operation of the Bang system for the eradication of tuberculosis. The separate herds, the isolation stables, and the system of ventilation and sanitation in use impressed one and all as fulfilling completely the requirements of the system. In the spring of 1898 a great many of the herd was found to be infected with tuberculosis, and as some immediate action was necessary, it was determined to give the Bang system a trial. Over fifty animals were slaughtered, but only three of these were unfit for human food. All others that reacted were separated from the healthy animals, and in winter housed in isolation stables erected for the purpose. The calves from the isolated herd are removed as soon as dropped, and raised on healthy nurse cows, the milk from the isolated herd not being used for any purpose. The calf is allowed to suck the mother once only before making the change. This practice has given eminently satisfactory results, not more than two per cent. of the calves ever becoming diseased. Mr. Edwards is a thorough believer in the tuberculin test, and thinks it should in no wise be discarded until some better test is discovered. Mr. Edwards expects thoroughly to eradicate the disease from the herd, and thinks that, at the longest, it should require not longer than ten or twelve years. The entire herd is tested every spring, as the test is considered more reliable then than when done off the grass. The stables are thoroughly disinfected twice a year by brushing as clean as possible, then burning brimstone in iron pots for twentyfour hours, after which a steam pipe is inserted for twelve hours. It is then whitewashed, using carbolic in the wash. To combat tuberculosis with any satisfaction it is necessary to have a good system of ventilation and plenty of sunlight; be very careful as regards general sanitation, and allow as much open air light as possi-

# SENATOR EDWARDS' ADDRESS.

The visit to Pine Grove Stock Farm, and the address of its owner, Hon. Wm. C. Edwards, constituted the outstanding feature of the whole association meeting. After a few words of appropriate greeting to the veterinarians assembled, he said:

I have been asked by Dr. Rutherford, Chief Dominion Veterinary Inspector, to read, on this occasion, a paper on the Bang System for the eradication of tuberculosis as practiced on our farm here. This is a subject more properly to be dealt with by a professional man than by a layman. However, if in what I have to say on the subject I express opinions which may be at variance with the accepted theories and practice of the profession I am fully aware that the consideration due to a layman dealing with such a subject will be accorded me by the profession, and before launching out to give expression to our experience and my views upon this most important subject, allow me to express the great pleasure and gratification it affords

me to see here t bers of the vete United States as men and others of the health of with human life. Referring to

SEPTEMBER 2

with human life.
Referring to
tween human bei
the statement r.
Dr. Koch, somet
of tuberculosis i
not to have the
beings as was fo
tion or similarit,
culosis and the
other is, howeve
men to thresh ou
opinion on

THI I will be permit for myself I rega remains, is to a the greater secu there is danger u there is no dang culosis in variou diseased. But of disease is not con is no reason why cation of the dis for a moment. to the animals the disease shoul to the greatest source from when improvement of our pure-bred he process of spread the entire live-sto is not eradicated injurious to the measured by sur animals will be tary or unsanital that, regardless life, it is highly that his herds as every nature, an culosis, one of t our animals, be most emphatically cated, by reasons this respect can recommend is

which has been the year 1898. to ship some you Dominion Veterin our surprise and to the tuberculin of the existence o days we were und consultation with Minister of Agric whole herd, and visability of adop cation of the dis once placed us in the then Chief I immediately had full information a tem. The greate test from the diseased out and kill all individuality, and veterinary inspecti slaughtered, only but in all traces degree, were fountraces of it. Tl herd were most th of the healthy ani erected for the d herd, and in like been kept in sepa healthy ones since in any way.

SUCKLING I In the inception the milk from the McEachern, and fe plan we found su calves was concern one, and, further, from the fact tha first taking the This plan, while s and we have adop nurse cows, allo mother once before found most succes practice of either vouch for it from can be most succe diseased sires and out, the percentag very small indeed, sidered. In our tirely satisfactory the practice to or