by the job till the last

mes for him to quit for

t there's naething ever

Duncan, lookin' around

no mistak', ye're right,

m thinkin' o' gaein' up er, providin' I can get

neebors, to look after

I have been making a

e fauna and flora of

issanog, in the north of

he main trees in this

nd Cedar, and the chief

of Willows (the Glaucus

and the Shining), the

Bush Honeysuckle, Of

reat many species, the

Bracken, Bunch-berry,

lower, Clintonia, Star-

enrod, Canada Golden-

of this thicket the first

eat abundance of insect

d leaves, on the herbs.

trees, in the trunks of

erhead, are hundreds of

habitats, the ants are

ants which make little

rger species which tend

of various plants, and

k Carpenter Ant, which

bound in the thicket.

being the Red-legged

Locust, and the large

wings margined with

rickets-the Large and

common, and there are

d Katydids among the

and Willows are two little insects, somewhat

from above, which hop

They have long beaks

of the stems, and the

n the bark which they

kinds of galls produced

one of the commonest

g the Pine-cone Willow of a branch and bears a

is gall is formed by the

terminal bud growing

rnodes of the stem fail

gall is the Willow Pea

of numerous yellowish on the underside of the

er galls on the Willows,

with the gall-forming

ily recognized and most

ods and Asters attract

-chiefly bees, wasps and

my species, among the

pecies of Bumble-bees.

Flies, some of them

ation, while others re-

sely, so closely in fact sary before one is sure

species of butterflies-

berwell Beauty, Red

ortoise-shell, American

Silver-spot and the

of this habitat is the

e tree frog, a little over

olique cross on its back.

ticky disks at the end

an adhere to the trunks queaking notes, which

ring-time song, are a

damp weather. The

Frog also occurs, and

heard. The Leopard

and Northern Frog are

not very numerous as he Chickadee, Wilson's Woodpecker, Flicker,

r-will, the latter two

in song at this time of

et are the Chipmunk, rying Hare, Common

is a complete list of the this thicket, they are conspicuous, but the

ow the great abundance

impunity.

gon-flies.

and logs.

e shrubs

iary.

a Thicket.

M.A.

THE HORSE.

Handle the foal carefully, but do not allow it to become master.

Clean legs and a clean skin will save many bushels of grain. Use the brush freely—the horse will respond.

Put plenty of horses on the heavy implements so the work will not be too hard, and then keep them moving.

Raise good, big draft horses and sell them before they wear out. In this way the power-costs of the farm are reduced to the minimum.

If you have a number of brood mares some of them should be rearing foals, and fall colts can be handled conveniently on a good many farms.

The recent fairs have brought out some extra good Canadian-bred horses, but we should have more of them in a country as large as Canada.

Treatment For Bad-Legged Horses.

Many breeders and users of heavy horses would gladly part with a considerable sum of money in exchange for a remedy that would make bad legs good. Weight in a horse is often accompanied by an undesirable condition of the underpinning, and heavy feeding is the cause of much trouble. A horseman writing in "The Live Stock Journa!" taps an ancient keg of horse lore and mixes the contents thereof with something a little more modern. The result is something not extremely practical for the average horseman, but revertheless interesting. Water is strongly advocated, but the sea-water, which is also recommended, is too remote from the majority of horsemen in this country to be of any use. The ideas, however, are worthy of study, and we are reproducing the article in the following

paragraphs:
Moving about amongst trainers, breeders and dealers, I am struck by the tendency of some of the

newer school to decry many of the old methods of horse management as "an old wives" tale," on no better grounds than that they did duty in the days of our grandfathers, and therefore must, as a sine qua non, be out of date. No one will deny that there has been evolution in the management of horses, that great strides have been made in veterinary skill, and that certain old ideas with regard to getting horses to the top of their physical fitness and con-

dition, have been who lived two or three generations or less ago to the realms of ignorance and superstition. The descendants of the old school, those whom they trained, and who have their blood in their veins, have not cast to the winds many of the old-time equine practices which are almost instinct in them, and with one of these I spent three years of my life, which I look back upon with gratitude and interest. As far back as my friend could trace his genealogy his forbears had been concerned with horses—racing, training, showing, dealing and breeding. Horse lore was imparted with their mother's milk, some of it very interesting lore, too, for there were at least two out-crosses in their away-back pedigree of gipsy horse dealers. The trainer of race horses, with whom I spent these three most educational years, gained a reputation for his success in treating and getting fit bad-legged horses. So much so, indeed, that not a few folk in the North who had horses which had broken down or which looked as though they would

never stand the preparation for racing, used to say, "Send him to ——, if anyone can get him fit he can."

Now, however, antiquated and out of date this trainer dealer's methods may have been in the light of comparison with the present-day science of horse management, it is a significant fact that despite the scores of horses he had through his hands-many of them apparently crocks—during the years I was with him, he never had to call in a 'vet." for illness, and he won races under both rules with most of the horses which were considered too "gone on the forelegs," to stand training. Similarly he got several Hunters which were a little "dickey" on their tendons and not absolutely sound, as fine on their legs as ever they were, and as safe conveyances across country. He was no advocate of the summer's run, with all the possibilities of leg and shoulder jarring through the galloping and stamping during fly persecution or the example of buoyant equine youth, nor did he often esort to pin-firing. His system was "Clean 'em out

with a good dose of physic, rough 'em up in a big loose box, give green meat and endless "tap." For hours and hours these bad-legged horses stood on the tap-i, e., with the ringed hose attached to the bad leg and a constant stream of water playing on it. He was fortunate in being surrounded with some of the best turf in England, and here he had his bad-legged horses walked if they could put a foot to the ground at all. Sometimes it took many weeks before the final stage of the treatment came-sending the bad-legged horses down to the sea. They were ridden in the sea, made to swim behind a boat, and two or three times a day spent an hour or so in the waves. Not only did this work wonders with their legs, but it helped to muscle them up, and one could almost stand and watch them improve in condition generally.

To-day there are some of the new school who laugh at the tap and at sea swimming for horses, some who argue that the latter makes horses slow, but I am convinced that for bad-legged horses both work wonders if men have the patience to carry out the treatment. sea seems to tighten up the ligaments just as the tap fines the legs, reduces heat and gives renewed strength to legs which have been jarred, strained or are naturally weak. The old-time gipsy horse dealer used to tether his horses in running streams for bad legs as well as laminitis and other foot ailments, and he was famed as a rejuvenator of horses and as a horse doctor. The tap and hose, however, are later-day inventions, which free the horse from many of the objections to being left for hours in the middle of a stream. Horses get to love water and to thoroughly enjoy sea bathing, and it may generally be taken that when a horse is enjoying himself he is doing well.

LIVE STOCK.

When beginning in pure-breds begin right.

When the nights begin to get wet and cold the cows and calves are better in the stable than huddled beside a

The stock to be entered at the winter fairs should



A Class of Hackneys at the Canadian National.

exploded. Even so, it is a conceit and a fallacy to be receiving extra attention now. Animals cannot be relegate all the methods of stable management of those fitted to win in keen competition in a week. It takes

> Endeavor to have the ewes in a thriving condition at breeding time. A higher percentage of lambs will be obtained next spring than if the ewes are failing in flesh at time of breeding.

> Don't forget the green feed for the sow brought in from the pasture and confined in the farrowing pen. Make the ration of a laxative nature if trouble with sow and litter would be avoided.

> A Lincoln ram recently sold in England for 1,000 gs. He was for export to Buenos Ayres. Our competitors in meats on the world's markets are buying the best breeding stock available.

> To win in strong competition year after year with stock bred and raised in your own stables is a credit to any breeder and indicates that he is working along the right lines in his selection of a herd sire.

> The value of a good sire was plainly indicated in classes for three animals get of sire, at the Canadian National and Western Fairs. It is difficult to put a value on sires whose get stood at or near the top of such strong line-ups. Are you paying as much attention to the quality of sire used as you should?

> Millfeeds advancing in price, and hog prices tumbling places the stockman in a quandry as to what course to persue in his breeding operations. As live stock is the back-bone of good farming it would seem advisable to breed the usual number of good cows, sows and ewes this fall. It may not pay to breed the inferior females. Cull and market the mediocre stuff, but keep and breed

When the excellent class of aged Shorthorn cows were being judged at Toronto, a prominent breeder commenting on the class, suggested that it would be a good thing if cows were shown with calf at foot or else showing well advanced in calf. The value of a cow is determined by her ability to produce offspring of high quality. No matter how beautiful or typey a cow is she is practically useless to the herd if she will not produce living calves and raise them.

"I fant to buy a young bull, but do not want to pay nore than fifty or seventy-five dollars for him. Have you a calf you will sell for that figure?" This is how one breeder of pure-bred cattle was approached by one wishing to get a bull. Breeding quality, character or individuality were of little concern so long as he did not have to pay more than seventy-five dollars. The quality of steers seen in some loaclities indicate that more than one stockman holds the dollar before his eye when purchasing a herd header. Such a policy will never get the stockman anywhere nor will it place Canada on a firm basis as an exporter of meats. Pick. the bull that suits your requirements and ask the price afterwards. It will pay to go in debt to get a bull that will improve your herd and leave steers that will be market toppers.

Feeding the Runts.

With a litter of ten or eleven pigs there should be no runts if the sow is a good milker. But, in larger litters there is more or less of a fight for a place at meal time and the more lusty fellows are liable to rob the weaker. The pig which does not obtain a full ration becomes stunted and very often dies unless some trouble is taken to give it extra attention. Left to themselves it is a struggle of the weak against the strong and the survival of the fittest. Unless the feeder assists the weak there is lack of uniformity in the litter. Young pigs will soon learn to take milk from a trough if given a chance. At the start the pigs may be fed cows' milk from a bottle or they may be taught to drink by putting pieces of cloth in the dish. We have seen the pigs grab the rags in their mouth and suck the milk out of the dish. Once or twice a day feeding is not sufficient. Fresh milk should be given five or six times a day. Providing plenty of trough space and supplying enough feed to satisfy all is one method of keeping the litter uniform in size. Using a creep for the smaller pigs is a good plan. This consists of a pen accessible only to the small pigs. In it they have a trough of milk to themselves. One successful hog feeder who has his farrowing pen in the stable has a small opening in the door through which the pigs may gain access to the stable and a trough of milk. In this way they get extra feed along with exercise which is essential to the best development of bone and muscle. Scattering grain on the floor of a separate pen is also a means of providing feed and exercise at the same time. In every farrowing pen provision should be made for giving extra feed to the litter. Some advise killing the runts, claiming that they seldom pay for the trouble necessitated in raising them. However, a little extra care and feed will bring them along to a marketable weight within a few weeks of the best of the litter. If you haven't time to bother with them, let the boys and girls care for the runts but when they have started them don't claim them as yours. Let the boys and girls own the pigs which would likely have died under the ordinary care given. They deserve this reward for their work and the return should be theirs to do with as they please.

He Borrowed Money to Buy a Bull.

Borrowing money to purchase a pedigreed herd sire may not be an unusual occurrence, but for Tom two decades ago it was a big undertaking, at least his father and neighbors thought so. In fact, he was ridiculed for paying two hundred dollars for a bull when there were plenty that could be purchased for fifty dollars, and many were using the twenty-five-dollar kind. Live stock prices were different then than now, and the two hundred dollars would purchase a bull of the quality that would not stop much short of four figures in the auction ring to-day. Tom's neighbor-hood was not unlike most others at that time and not unlike a few to-day. Grade cows, many of mediocre quality, were kept and bred to the nearest bull, whether grade or pure-bred. If service could be secured for fifty cents all well and good. A fifty-cent sire was worked to death, while the man who deigned to charge two dollars had only his own cows to breed. Not unlike things to-day.

Tom had not been satisfied with the class of stock kept at home, but was powerless to make changes. He was a good feeder, but the quality of cattle kept were not good material on which to work, and results obtained were not very gratifying. Tom's father could or would not see the wisdom of using a better sire so as to improve the herd, and as there is no standing still—the herd deteriorated rather than improved in quality. Several pure-bred stock farms had been visited by the boy, and what he saw there left a deep impression. When he started for himself he was going to have good stock. Being one of a large family, the start which Tom received would not be considered large. A team of horses, a couple of cows, a brood sow and seed to plant the first crop was about the extent of the assets. But, coupled with/these was that determination to make a home and a success of farming. A few grade cows were purchased on time at a sale and these were bred to a neighbor's grade bull, there being

d by an intensive study

hauling of manute go bor problem."