

student becoming a successful practitioner? Certainly not. The crux of the whole question resolves itself into one of practicability. No student, no matter if he has graduated with the highest honors in every subject enumerated by "Veterinarian" as being essential, can ever hope to be a successful practitioner unless he is practical; and how a student from the city, following the curriculum laid down by "Veterinarian," can ever become practical is a mystery. Students of this class, he says, should spend the first vacation, six months, on a stock farm, to become familiar with animals in health. What can such a student learn in that time? Almost nothing; six years is none too short a time for him.

The lack of practical experience, or, rather, unfamiliarity with animal life, is the bugbear of the profession. Owners and caretakers of our patients are usually practical men. They can tell in a moment if the practitioner they have called in is practical also, by the way he goes about an animal, and unless he does so in a proper manner his employer will have no confidence in him. The prominence attained by Ontario Veterinary College graduates is due very much to the fact that they are almost invariably conversant with animals in health before they begin to learn how to treat them in disease, and they are taught the latter by an eminently practical man.

The profession needs better men in it, better all-round educated men, but how can any large number of such obtain a living when the public is so ignorant of the honest practice of veterinary science? If "Veterinarian" will only outline some scheme to educate the public and disabuse its mind of the idea that the amount of the fee is to be regulated by the size of the bottle of medicine supplied, and convince it it is more profitable to pay for preventive advice than waiting to pay for curative treatment, "Veterinarian" will benefit our profession, our patients and our clients.

In formulating all opinions on the length of study necessary for the production of successful practitioners, which are the only class of veterinarians to whom I refer, and which the bulk of your readers are interested in, the character and qualification of the teacher of any institution must not be lost sight of. Some men are able to impart more knowledge in two years than others can in three, and as long as the Ontario Veterinary College retains its present Principal, your readers may rest assured that her graduates are mostly competent men. It is an old maxim, "Leave well alone," and the advancement the profession has made in the last twenty years, and is making to-day, indicates the success of the present system of education. Changes are always experimental; possibly a four-year course, or even one of three years, will produce more high-class veterinarians, but that every student graduating from such colleges makes a success of practice is contrary to experience; there are probably as many failures among three and four year men as amongst the two-year men who have gone through the Ontario Veterinary College.

As a veterinarian, I long and hope to see the profession go ahead, and am in favor of anything that will conduce to its further progress; the longest course obtainable is far too short for a thorough mastery of all essential subjects. Students leave college well grounded, ready to take up the completion of their study of any special subject necessary to the particular branch of the profession they have selected to follow.

I fear I have rather encroached on your valuable space, but feel bound to register an objection to having the finger of scorn pointed at that old established institution, the Ontario Veterinary College, which has, up to the present time, done more possibly for the advancement of the profession than all the other colleges of this continent combined.

W. H. B. MEDD, V. S.

### Losses on the Range.

Throughout the ranching districts of Alberta and Western Assiniboia, the past winter has been more seriously felt than any for at least ten years. Although the extent of the losses may not be considered as altogether alarming, they will on an average amount to considerable. While a few prominent ranches situated in belts where a limited snowfall was experienced, can report losses as practically nothing, others will be obliged to count their herds in numbers from twenty to thirty per cent. less than a few months ago. No correct estimate can yet be given, but several ranchmen of experience believe that the average loss will not be much below ten per cent. This has mostly all occurred among dogies, a large number of which were brought in from the East last fall. The balance of this class now upon the range are very thin, and will require good grazing for some time before a thrifty condition is regained.

On account of the favorable winters of recent years, there was a disposition on the part of many to put up less hay last summer than previously, and the result has been disastrous, but full of experience that will mean better preparation in future.

### Our Scottish Letter.

A poet has somewhere said something about winter lingering in the lap of spring. If he had been meandering round during the past month, his observations would have been excusable. We have had a long winter, but not of the Canadian sort. Of frost and snow there has been little, but of wind and rain there has been a superabundance. March has left us, and we have had no March dust to speak of. April is here now, and for the past few days there has been a gradual approach to spring-like weather. There has been some warmth in the atmosphere, and the winds have, one may hope, spent themselves. The clay lands of the Scottish Midlands are terribly sodden, and it is difficult to see how they are to be wrought. The seed-bed cannot be of the best, and it is likely to be of a moderate nature, even under the most favorable conditions now. If we have good sunny weather right ahead for several weeks, farmers will get the arrears of labor worked off, and once that end is attained equanimity will again reign. Prices for beef and mutton have, during the past months, been favorable. Dairy produce is selling well. A farmer was telling me to-day that he has sold his fodder cheese for 18s. per cwt. (of 112 lbs.), more money than he got last year. Grain prices are deplorable. The Board of Agriculture now sends out a weekly report on grain prices, and it is making sad reading. An improvement in this respect is much needed.

THE EXODUS TO CANADA goes on. Seldom have so many eligible lads and lassies left our shores in as short a period. The class going is, as a whole, the class that we do not care to part with, and their settlement in Canada does not mean any lessening of competition in our grain markets. But what can we do? It is the law of nature that the mother sees her children go from her to establish homes of their own, and it is the law of nations that the Old Land should shed her population to people the virgin soils of new lands. A curious fact in the present Canadian emigration boom is the number of mechanics and skilled workmen to be found in the emigrant bands. One reason of this is the restriction of employment in some trades on account of the increasing adaptation of machinery. This week among the emigrants are several compositors, thrown out of labor on account of the growing use of the linotype.

This is the season when learned societies and experiment stations submit their annual round-up. Much literature of that kind comes our way, and were we to read it all little else would lie before us in the way of toil. Professor McFadyen is the leading veterinary authority on this side, and his annual review of the health bill is always interesting. His report on 1902 is as exhaustive as any of its predecessors and gives a deal of information. Speaking of foot-and-mouth disease abroad, the Professor remarks that any assurance that the United States is clear of this disease must be read in connection with the fact that it existed for three months in New England before it was reported. This is a fact not likely to be forgotten on this side. It will not conduce to the modification of the existing policy of this country on the importation of foreign stores. Professor McFadyen has a good deal to say about tuberculosis and Dr. Koch's recently expressed views on the subject. He has not been able to find evidence in support of Koch's theory, but it is universally admitted that it is hard to prove a negative. No one but a madman would deliberately dose himself with tubercle bacilli, yet short of this it does not appear possible to settle whether bovine tuberculosis is communicable to man. Two Aberdeen teachers, Messrs. MacLauchlan Young and Hamilton, have been testing the converse. They have dosed calves with the sputum of consumptive patients, injected the said sputum under the skins of calves, and in quite a variety of ways aimed at the overthrow of Koch's theory that bovine tuberculosis and human tuberculosis are not the same disease. What they have found is that the absence of the lesion in the intestine is quite consistent with its presence in the mesenteric glands. In other words, they have shown that the bacilli may pass through the intestine without making a home there, only to find quarters in the mesenteric. Koch's theory was that absence from the intestine was equivalent to proof of non-infectivity. The situation at present seems to be this: It is proved that human tuberculosis can be communicated to the bovine species, but it is less virulent and not so likely to prove fatal as bovine tuberculosis. The verdict on Koch's deliverance so far, from all sources, seems to be "not proven." In that case it is wise policy to assume the worst, and act accordingly.

For nearly ten years past there has been great activity in experiment work throughout Great Britain. Perhaps ten years is too long a period to assign to the universal advance, but in any case experiments have been carried out in an unusually vigorous fashion for several years, and in all parts of the country. Hitherto no attempt has been made to distinguish what is local in these experiments and what of more general ap-

plication. The past month has, however, witnessed a change in this particular. The Journal of the Board of Agriculture contains a digest of much value, and in the "Transactions," or annual volume, issued by the Highland and Agricultural Society, there is an admirable article on the subject from the pen of Dr. A. P. Aitken, the Society's chemist. The Doctor regards the absence of soil analysis as the great defect in these experiments. This absence renders them of little more than local value. The broad fact in manuring practice is the increased attention to potash as a necessary element in a complete manure. There are a few soils so rich in potash that an addition from without reduces rather than increases the crop. This, however, is an exceptional experience. Farmyard manure is the best of all manures, because it contains all three foods—nitrogen, phosphates and potash. When a substitute for farmyard manure must be looked for, it ought to contain the three substances in abundance and rightly-balanced proportions. Dr. Aitken recognizes the ability with which the proprietors of the Stassfurt mines are pushing their wares, but he thinks farmers should think well and know well the constituents of their soil before they go deeply into the potash business.

I think reference was made in a former letter to the success which had attended the Canadian Banner oat in the West of Scotland. Trials of oats are being made all round. Ireland is at it, and in the North of Scotland the Aberdeen College had also a turn at the business. Neither in Aberdeen nor in Ireland has the Banner done as well as in the West of Scotland. It requires good land, and where fodder is a prime necessity other oats which have been longer in the field have been more favored. All the same the Banner is a great oat, and it will increase in favor in Scotland in proportion as it is known. Nothing can beat an old Scots oat called Tam Finlay for fodder. Its straw is delicious, and on high poor land Tam Finlay holds the field. The new oats can beat the old in grain, and especially in ripening qualities, but when it comes to straw for fodder and oats for grinding, the old sorts can beat them. Some of the new and very vigorous sorts have been nicknamed "Ironclads."

### THE CASTLE DOUGLAS SHOW.

The first of the general shows of stock was held at Castle Douglas a week ago. It was well worth seeing. Galloway cattle have seldom been seen to better advantage, and there was also a fine show of Ayrshires and Clydesdale horses. In the Galloway section the outstanding feature was the show of stirks of both sexes. There was quite a phenomenal display of quey stirks—the class numbering no less than 25 head. The leading and most successful exhibitor was Mr. David Brown, Stepford, Dumfries. His champion bull, Camp-Follower of Stepford, simply cannot be beaten. His quey stirk is the best finished Galloway of the age and set we have ever seen. Messrs. Biggar & Sons showed quite a number of good cows, and Major Wedderburn-Maxwell was strong in the same class of stock. Ayrshires were represented by an unusually fine display of cows and queys likely to be serviceable in dairies. Mr. Andrew Mitchell, Barcheskie, Kirkcudbright, has a black and white cow in milk, without question one of the best animals of her kind seen for many a day. The female championship, however, did not go to her, but to Messrs. A. & W. Kerr's "Senorita II." of Graitney, a promising three-year-old, which was getting the benefit of the doubt on account of her youth. It is expected that there will be a great show of Ayrshire cattle at Kilmarnock and Ayr during the next fortnight. The feature of the Clydesdale section at Castle Douglas was, as usual, the superiority and supremacy of the progeny of Baron's Pride 9122. Mr. Smith, Chester, showed a number of choice females after him. The champion stallion was the Messrs. Montgomery's two-year-old colt, Mertoun. He has grown into a great big horse, which is sure to attract the idea of a Canadian or an Australian buyer. An exceptionally heavy big horse, named The Mint 11213, is this week being shipped by Mr. James Picken, Toirs, Kirkcudbright, to Mr. Neil Smith, Brampton, Ont. This horse should please the new clamor for big Clydesdales.

"SCOTLAND YET."

### Skim Milk for Pigs.

I wish to call the attention of dairy farmers to the high value of skim milk for furnishing building material for the growing pig. One hundred pounds of milk contain seven-eighths of a pound of bone material. Nature intended milk for the young calf; that is, the cow's milk is for the purpose of nourishing a calf; now, if you feed that to the pig, there is the material in that milk which is intended to build up the bone of the calf, and it will build up the bone of the pig. When we use corn we use a material that is weak and lacking in bone material; the exclusive feeding of corn gives us pigs that have weak bones. The supplementing of corn with skim milk gives us a combination food which is very strong in bone-building material, and the farmer should not forget that fact. You who complain of too fine