

In subsequent years the young animal must have an ample supply of food suitable for its age, and enjoy at the same time the accommodation, comfort and warmth that are necessary for developing the effects of the food it eats, as without the latter provision the former may be in a great measure paralysed. The successful rearing of animals also requires a suitable provision of accommodation in the shape of farm buildings, without which the food cannot be economically used or administered, nor the animal derive the full benefit. The want of suitable accommodation is very justly urged as an impediment of good farming; in point of good breeding and rearing forms a very serious obstacle.

The Pleuro-Pneumonia Scare.

The pleuro-pneumonia scare in Canada is now an undoubted fact. We have long urged upon the authorities to take more care in the shipping of live cattle across the ocean, and Professor Brown, of the Privy Council Department of Agriculture in England, has ordered the slaughter of the whole stock, numbering over 100, which had been in contact with an animal said to be imported from Canada, and all stock owners who bought animals out of the same shipment are warned that they cannot remove a single beast off their farms.

The great majority of stock importers is firmly of opinion that the particular animal did not suffer from pleuro-pneumonia, because the disease is not known in Canada. Professor Brown, Messrs. Cope and Duguid, all experienced veterinarians, say:—We have here a disease which so much resembles contagious pleuro that we will have no doubt on the subject. The British Government have spent thousands and hundred of thousands of pounds sterling to get rid of this bovine scourge, and being free are determined to abolish and prevent, if possible, a fresh importation. In the City of Glasgow alone the annual loss from the disease to the dairymen reached the large sum of £4,566, and for the past two years there has not been a single case in any cow-shed within the municipality.

Professor Williams, of Edinburgh, the well-known author of veterinary works, stakes his reputation as a veterinary authority that this case is one of broncho-pneumonia, or corn stalk disease, and not a case of genuine contagious pleuro at all—so that one is led against their own inclination to believe that there must be some reason for this sudden hostile attitude towards the cattle from the Dominion of Canada. Whether the new Minister of Agriculture, Mr. Herbert Gardner, a country gentleman of whom very little is known as an authority on agricultural affairs, has been forced to adopt this step, we can only surmise. The fact is that never before has such a disease been proved or even suspected to exist in this country, and we regret that there is now the stigma of exclusion put on our cattle, or that they are suspected of having pleuro pneumonia.

This disease never has been seen in this country, and indeed diseases of the respiratory organs are very uncommon. Fortunately this is so, when we consider that Canada is essentially an agricultural and stock-raising country, for, according to recent statistics, there are more people engaged in farming than any other occupation. In the United States there are 44 people in every 100 who are engaged in agriculture, as compared with 56 in Canada, 7 in England, 16 in Germany and 48 in France.

Speaking practically of pleuro-pneumonia, during the whole course of the existence of this bovine malady, until very lately it had been but little understood.

All that could be said of the matter was, that such and such an animal was a "lunger," meaning that the animal in question was suffering from pleuro-pneumonia. It is only quite recently that it had been shown to be a germ disease or micro-organism.

The fact that the disease was confined to the lungs and pleura, or pleura (a serous membrane which lines the inside of the chest or thorax), somewhat prevented the external manifestation of the complaint, and thus there was no possibility of its escaping from the system by any other channel than the lungs. A great number of experiments or attempts have been made to communicate this disease by indirect means of food and water, but the gross results tended to show that independently of natural infection the means by which the disease was propagated were very doubtful and difficult to determine. Having gained access to the air passages, the germ or organism must either produce its effects on some part of the lung tissue through the bronchial tubes or gain access to the blood in the circulation and there multiply, producing in its effects the process of inflammation, then depositing its material in the pulmonary apparatus (lungs) secondarily.

This germ, when fully established, tended to spread, though curiously enough it seems to be limited in its attack to some particular spot.

This limiting character of the disease was of the utmost importance, for it is only by this means we can understand or explain why it was so prolific in carrying the infection from stock to stock. Those who followed in our paper the articles written by Dr. Mole, N. S., on "Inflammation," will remember that in speaking of lymph being thrown out as a result of inflammatory action, it was always the product of injury to a tissue. Immediately after the inflammatory process was perfected and its extension arrested, the damaged portion of the lung became surrounded by coagulable lymph, which acted as a temporary capsule, and so long as this encapsulating wall was preserved the subject remained harmless.

After a time—weeks or months—active changes again take place; as a result the imprisoned lung became softened and liquified in this way; the expired air became charged with the micro-organisms ready to invade a fresh subject.

The most potent factor in the spread of this malady was the actual cohabitation of diseased with healthy animals.

Bad ventilation, insanitary surroundings, over-crowding, moist condition of atmosphere, and warmth were all favorable to the propagation of pleuro-pneumonia, and no where are they more exposed to these conditions than on board cattle ships.

We are not in a position to speak of broncho-pneumonia, as the disease has never come under our immediate observation, and therefore it would be idle to speculate as to the exact conditions as seen in the living animal, but according to the reports recently received on this matter the characteristic symptoms of broncho-pneumonia and true contagious pleuro-pneumonia are very similar to the naked eye and require accurate microscopic examination to separate. But there is one test by which it may be clearly proved whether any suspicious case like the case of the Canadian stocker be really contagious pleuro or not; that is, by inoculation of some healthy animal with the lymph from the lungs of the suspected one. If the disease be really contagious pleuro the animal will have a modified form of that complaint, but if the disease is not no such results will follow.

We would urge on the authorities to at once institute a commission on the whole subject of the prevalence of contagious diseases in Canada, to investigate the method of collection and devise means of identification, for by these means alone can the confidence of those in the Old Country be restored.

Stock.

Scheduling Canadian Cattle.

BY J. C. SNELL.

The order of the British Government scheduling Canadian cattle may and no doubt will for a time have a depressing effect upon this great trade, which has been so full of interest to the farmers of the Dominion, as well as to the men who have been engaged in exporting cattle, yet we believe it is safe to counsel our friends to take a hopeful view of the outlook. We have still equal privileges with the rest of the world, inasmuch as our cattle may go to the ports of England to be slaughtered if they may not go inland alive, and if we give more attention to the quality and condition of the stock we send over we can hold our own against all comers. There is no doubt that the shipment of dressed meat is the safest and the most economical mode of disposing of our surplus cattle, as probably five times as much meat can be shipped in the same space, and the expense of feeding and care will be saved while in transit, but with the experience in this line that our American friends have had with the mammoth dressed meat companies, it behooves the representatives of our agricultural constituencies to use every exertion in preventing a repetition of this monopoly. The shipment of "stores" or "stockers" to be fed in Britain, while it has been the means of bringing in a little ready money to those who were not prepared to feed their cattle here, has been in the long run a source of loss and a detriment to the farmers of Canada. It has been a huge mistake to sell cattle at such low prices as have been received for this class to be shipped to the Old Country, where our coarse grains, and in some seasons our hay, also sold at low figures, is shipped after the cattle, to be fed to them over there to fatten them, to be placed in competition with our own beves in the markets of that country. How much wiser it would be to feed the cattle at home, and get the advantage of the increased weight and the improved prices which prevail in the spring, besides making a large quantity of the best manure to keep up the fertility of our farms. In the average of years we think it is safe to say that the steer that will sell for only \$30 to \$35 in the fall will, if fed well, bring from \$60 to \$70 in the spring. Surely this is a more profitable way of disposing of the hay and grain we raise than putting it on the market in competition with the cheaply grown product of our Northwest provinces.

Another point which needs to be particularly emphasized, if we would hold our own or take a high place in the markets, is the necessity for improving the quality of our cattle. It is a constant complaint of drovers and feeders that they cannot find a sufficient number of well-bred cattle that promise to give the best returns for feeding and handling. It seems unaccountable, after the innumerable examples of the fact that well-bred animals make a vastly greater return for the feed they consume, that so many of our farmers yet fail to avail themselves of the privilege of improving their stock. It surely is not because the cost of pure-bred males is high, or the charges for their service exorbitant. We venture to say that at no time in the last thirty years have the rates been more moderate, and yet we regret to say that we hear the remark frequently made that our cattle are not as good as they used to be, and that it is more difficult to find a good selection for feeding purposes than formerly.

If it were not for the immense importance of the subject, and our intense interest in it for the sake of all concerned, we would be disposed to grow weary in the work of urging the farmers of Canada upon this point, but it is too serious a matter to be dropped, and we are constrained to repeat it "line upon line, here a little and there a little." We must, if we would make the best use of our privileges, have better cattle and more good cattle. To this end let every man who reads these words, and who has given thought to the subject, resolve to do his part by precept and example to bring about the desired result.