

proportion of female stock, but the natural increase is about 85 per cent. of females. Texas is a state of empyrean proportions, but without a very large outlet she will very soon completely overflow. Already cattle are being crowded far out upon the Staked Plains, and many have been moved into New Mexico and Arizona. It is generally estimated by the best authorities that, this year, it will be necessary for Texas to dispose of between 750,000 and 1,000,000 head of cattle. How can she do it? The trail is closed. Last year she sent 500,000 head north in that way. One advantage of that route is that the cattle are scattered over the west and are fattened before coming to market. But, as matters now stand, it will be necessary to crowd the whole number chiefly upon the big markets. One effect of this will undoubtedly be to reduce the prices. It is calculated that Chicago will receive some 500,000 cattle direct from Texas this summer, and the canners and dressed beef men are enjoying the prospect of a big harvest and low prices. At the same time, if prices are lowered too much, the big run will be checked, as it can in a large measure. For instance, there is one cattle company which would like to ship 4,000 head of beeves, but if the prices are too low, the company will only ship 2,500. This is the way with a great many others; though there are some who will have no choice but to ship, be the prices low or high. A cattle man just arrived from the south-west says money has been harder to command in that State the past nine months than was ever known before. This tightness of money matters was simply the result of large obligations which were assumed on false prospects. At the same time, it is true that the average Texas cow man is more frightened than hurt by the present serious aspect of affairs. There have been no business failures in the Texas trade; only the dealers and growers have been in very close quarters.

It is said that the northwestern men who took so much satisfaction in quarantining Texas cattle may have to pay dearly this fall for their pleasure. It is said the market will be heavily flooded with choice Texas beeves, about the time the Wyoming, Colorado and Montana crop will have to come.

The End of Live Stock Plagues.

BY MARSHFIELD.

I have scoured creation for literature on the contagious diseases of live stock for the purpose of being able to make a correct prognosis. It is one of those questions which can best be discussed by considering the effects of agencies when pushed to extremes. Shall we everlastingly continue to squander millions upon quarantines, nostrums and office holders, in futile attempts to eradicate these diseases? Shall we exterminate the affected races from the face of the earth? If so, can a substitute be found?

In this article I shall not have time or space to discuss my reasons for asserting that these diseases will be perpetuated unless some radical change of measures be adopted; meanwhile let it be understood that their ravages are being repeated on both sides of the Atlantic, that the conditions for their perpetuation still exist and will continue to exist so long as the ignorance and cupidity of politicians and speculators stifle

their moral perceptions. The progress of the diseases has called into being an inordinate multitude of "vets," who divide their time between office seeking and getting up contagious disease "scars." Amongst the influences which tend to counteract this state of affairs, I notice one in England and another in Germany.

A few years ago there was in our neighborhood a rage for cooking food for live stock, and when the question was discussed at one of our club meetings, I was asked whether boiling or steaming was the preferable mode, to which I answered: "Gentlemen, that question is unfit for discussion until it is first proved that cooked foods are preferable to raw." At present the meat business is exactly in the same plight. For ages we have been discussing the best methods of preparing meats for consumption, but to moderns belong the discovery that man is not a carnivorous animal. He has also been proved to be neither herbivorous nor omnivorous, but belongs to a distinct type which may be called the *cooked-food animal*. John Bull, that proverbial beef eater, actually takes the lead in waging war against flesh! I have been slow to accept the evidence of chemistry as conclusive in the philosophy of dieting, believing that the nutritive value of a food is also governed by physiological or magnetic laws. However, vegetarians are gathered from all schools, and if the evidence of their experience is true, if meat "must go," the world will continue to wag just as usual. The advantages of economy give great strength to the vegetarian school, and cause numerous converts to be added, but a large majority become disciples from principle. In London (Eng.) there are nine vegetarian restaurants where penny meals can be obtained, which contain about three times as much nutriment as the beef and potato dinners procurable in the American cities for fifteen cents.

In Germany the buffalo is being written up. I am greatly surprised that the Americans were not the first to discover that this animal contained the nucleus of a boom. No prejudice can arise against this animal, for it belongs to the same family of quadrupeds as the ox, although it possesses many distinct characteristics. Whether this boom has been created for the purpose of attempting to annihilate the ox tribe, or to cross with it, is not clear; but this is certain, that the introduction of the buffalo, either in whole or through the blood of the ox tribe, would tend to eliminate those contagious diseases which are playing havoc in our herds. The statements which I shall make concerning the buffalo are drawn from writers who have had practical experience in buffalo dairying, and the general management of buffaloes.

The buffalo is alike useful for its milk, flesh and work, the female being as useful under the yoke as the male. The price of the milk is one and a half times higher than that of the ordinary cow; it contains twice as much fat, although the average quantity is not so great. The buffalo will flourish on coarse hay and grasses, corn stalks, etc., on which the ox would almost starve, and it will convert finer foods into more profitable account than the latter. It will convert into milk many hard foods on which the cow would run to skin and bone. It will thrive better on bare pastures than the ox, and is very well adapted to stall feeding. It is

rather tenderer with respect to cold than some breeds of cattle, but it stands the cold climate of Germany very well under average shelter. The female will breed till twenty years old, and the flesh is then as good as that of old cattle. The flesh of the young buffalo is as juicy and tender as that of young steers, but for smoking and otherwise preserving it is much superior.

Let me take another leap into the future. Should the buffalo boom make headway, our breeders and speculators would soon convert the race into a mass of corruption, just as they have done with some of the breeds of cattle, and I can already imagine them scouring the earth for some neglected old scrub bull or cow for the purpose of rescuing the aristocracy of the buffalo race from perdition.

PRIZE ESSAY.

How Should the Farmer Proceed to Improve his Dairy Herd, (1) for Butter, (2) for Cheese.

BY STANLEY MILLS, HAMILTON, ONT.

Before proceeding with this subject let me call to mind a few well known facts. It is admitted by every farmer who gives the subject a thought, that Ontario can not in the near future hope to compete against the Canadian and American Northwest Territories in the grain markets of the world. What then shall we do with our grain? Let us look a little further. We find that Ontario holds her own, not only on the live stock, but also on the dairy produce markets. Here, then, is our opportunity. Let us take advantage of it; let us feed our grain, thus finding a home market for it, and at the same time producing something at a profit to ourselves. Let each farmer ask himself this question: Am I a dairy farmer, and if not, why not?

Dairy farms may be divided into three classes. First, those producing butter, which may be situated in any locality without regard to our local markets, as it will safely stand shipment. Second, those producing cheese, which must be in the immediate neighborhood of a cheese factory, an institution which all farmers are not blessed with. Third, those producing milk, which are only profitable in the vicinity of our larger towns and cities. It will be seen from this that although all farmers cannot profitably produce cheese or milk, by reason of outside requirements, yet all have the same chance on the butter market. Here, then, comes our subject: How should the farmer proceed to improve his dairy herd?

First, for butter—We have given a farm with all the requisites for dairying, including good warm stables, having plenty of light and ventilation, and an abundance of good, fresh water close at hand. These are necessities for the purpose, and do not proceed with any hope of success unless you have them. There are in stable at the present time, say, from six to twelve average cows; some you know to be heavy milkers; some whose milk you have been told is rich in cheese producing qualities; and perhaps one or two that you think are good butter cows. Discard all these ideas, and put each cow on her individual merits by actual test. Weighing the milk night and morning, and churning separately once or twice, will be