



First-prize Shearling Oxford Down and Champion Ewe of the Breed
At Toronto, 1910. Owned and exhibited by Peter Arkell & Sons, Teeswater, Ont.

for food purposes should be thoroughly pasteurized.

When diseased animals are found, the stables from which they are taken should be thoroughly cleansed and disinfected.

When the stable can be tightly closed, formaldehyde gas, properly used, is reliable and satisfactory.

If tuberculous cattle have been kept in a small yard, the litter should be removed, the surface plowed, and the fencing and other fixtures thoroughly cleansed and disinfected.

Why Winter Hog Lice?

There is small reason for the continued presence of lice on hogs. When pork is as high-priced as it is now, it is folly to lose largely what might be clear profit by neglecting this pest. When pork is cheaper, no one can well afford to harbor such destroyers. Lice should be cleaned out of the pens and yards, and kept out. To do this requires frequent attention. They are more likely to appear on fall and winter pigs for which reason more attention should be given to these. The pigpens should be thoroughly disinfected, and the pigs dipped two or three times at periods about ten days apart. For dipping purposes, any of the reliably-advertised dipping mixtures or coal-tar products may be used. Where no dipping tank is owned, the same end is served by placing the pigs in a pen and thoroughly sprinkling them with the mixture. Small pigs may be effectively dipped in a barrel. Few farms where dipping or its equivalent has not been practiced are free from lice, and it would behoove every man who has pigs to winter to see that both the pigs and their quarters are cleaned of lice before the cold weather sets in.

Cull the Herds.

Too many men hold the opinion that most everything on their farms is just about right. Their teams keep a little fatter on less feed, yet do more work; their cows give just as much milk as anyone's else, and of higher butter-fat content; their sheep always raise more or larger lambs, and their sows the largest and evenest litters of the settlement. But, in truth, there is scarcely a farm throughout the land that is not carrying too large a proportion of deadweight live stock. The sensible thing to do now is to divest the problem of all sentiment, and in a business manner discard every animal that is not handsomely paying its way.

In most every man's group of calves are to be found some stunted ones that for one reason or another give promise of a slowly gained, dwarfed maturity. They will never pay. As beef animals, they will eat their heads off; the females will never make desirable breeders or milkers. The thing to do is to hasten them off the place before winter sets in.

Likewise, in almost every herd of milch cows there are cows that have not paid for the pasture they have used, and the labor expended on them. They have deadheaded their way for a number of years, being kept, perhaps, because their dams or their grandams were what were then thought to be good cows. If records have been kept by use of the scales and Babcock tester, the owners have at

hand a very ready source of reliable information upon which they can convict these poachers with perfect safety. If these records have not been kept, it is not our fault. They should be kept by every dairy farmer who aims to be progressive. We have kept it persistently before our readers, and urge you now to begin keeping these records and put a stop to the dishonesty which your cows are practicing. Blank forms for keeping these records may be obtained free on application to J. H. Grisdale, Dominion Agriculturist, Central Experimental Farm, Ottawa. Write to-night. As soon as these culls, these non-producers, are located, fatten them up, and let the butcher have them.

And there are horses which have amply proven that

they can neither do a draft horse's work day in and day out, nor a road horse's work at any time. Some of these have been kept for many a day. They are not good enough. They eat almost as much as the right kind of a horse, but never give satisfaction in harness. They are poor advertisements of your business acumen. If they are brood mares, they are still less desirable. Let the grocery man or the other city fellow have them; they can come nearer making good use of such horses than can farmers. Let them go, and, in place of three scrubs, get a pair of good (if possible, pure-bred) draft mares or other mares of the type preferred, study to use them rightly, and know by your own experience what you now believe is good practice.

Similarly can scrub brood sows and breeding sheep be located in every breeder's possession. Get rid of them; it seems costly to do so, but in reality it is an actual saving. One will be money ahead every time he discovers and discards an unprofitable animal. And that money can be put into profitable ones.

Dairy Bull Requirements.

Thoughtful farmers who practice taking time by the forelock are casting about at this season in search for a suitable sire to place at the head of their herds for next season. By making that purchase now there is a larger stock from which to select than at any later season. Though one may reasonably expect to be able to purchase a bull at almost any time, yet it must be remembered that, during October and November a very large part of the breeders' surplus stocks are being picked up, and, assuredly, all of their best animals. It stands to reason that farmers can winter their bulls just as cheaply as the breeder, so that, by early buying, the additional costs of wintering, and risks encountered by the breeders in carrying their stock longer, do not have to be paid for. By having the bull in his new home during the late fall and early winter, he has an opportunity to recover from the ills of shipping, becomes accustomed to his new conditions, and his own it has the privilege of giving him the care required to put him into first class herd service.

In buying a new stock bull, whether to head a pure-bred or grade herd, never be niggardly. Put every dollar into the investment that you can conscientiously spare, with out throwing your

money at the seller. It is not a question of buying a good bull, but of buying a bull that is superior to anything that you have previously had, in order that he may have the ability to improve on the already improved herd. Not only should he be better than the best one, but he should be as much better than the best one as you have money to purchase. Every dollar judiciously invested in buying superiority in a bull will return dollars in milk, and that right speedily.

The new bull should be of the same breed as those that have gone before. There is merit in all of the breeds, and if a man, in starting out for improvement, has selected a certain breed, he is surer of attaining his end by adhering to that breed than by changing. However, uniformity in an entire community is a splendid characteristic, which would justify the changing from one breed to another if such an end would be accomplished. However, excellence is not assured by the selection of any particular breed, but by judicious selection after careful and continuous study of the performance of individuals within the breed.

In selecting a bull, the two factors of individuality and ancestral performance must go hand in hand. Whatever the breed, constitutional vigor, as revealed in a strong heart girth, a capacious middle, evidenced by a deep flank and a long, roomy barrel; quality, as reflected in refined bone, a soft, lively, fine coat of hair and a loose, mellow hide; and the nervous development, which indicates a highly-organized and well-controlled system, should all be in evidence. But, of at least equal if not greater importance is the record of performance back of the individual. Has the dam of this bull a record for heavy production of high-testing milk? Is his sire out of a dam that has a record that is desirable? These are the questions that the pedigree of a bull should answer affirmatively before he is taken to head a herd of milkers. The greater the number of cows of such capacity, close up in the pedigree of a bull, the more certain is he likely to prove a profitable sire. Couple these requirements with the individuality of the animal, and get the highest combination of both that your finances can command.

Beyond this, there are some things which, in buying, must not be overlooked. The herd from which one selects should be clean. Few men can afford to import tuberculosis or contagious abortion into their herds, no matter how much they may desire some of the animals from an infected herd. Tuberculosis may be readily detected by the tuberculin test, and a buyer will do well to demand such test, even if it costs more; abortion is not so easily detected, but its presence can usually be learned, and both should be carefully avoided.

Hogs to Test for Tuberculosis.

The tuberculosis problem and its solution has been given careful study recently by Burton R. Rogers, of Kansas State Agricultural College, who formerly was Federal Veterinary Inspector. In a pamphlet recently sent out, he deals with the danger of hogs becoming tuberculous from getting the germs in faeces from tuberculous cattle running in the same yards or fields. His claim is that ten per cent. of all cattle in the United States are tuberculous, and that forty per cent. of those that react to the tuberculin test pass tuberculosis germs. Hogs rooting through these faeces naturally become afflicted with the dread disease.

Mr. Rogers points out that the hogs in reality test the cattle, because, when a tubercular hog is found in the slaughter-house, it can safely be inferred that he came from a farm on which there were cattle suffering from tuberculosis. The diffi-



Prime Lad 32nd.

Headed bull, bred by J. H. Rogers and over, at the Western Fair, London, 1910. Owned and exhibited by O'Neil Bros., Southgate, Ont.