

3528, were very superior cows, both in breeding and individual merit, the latter having been sired by Young Baron 42b, by the noted bull Baron of Bucklivie, that never was beaten in Scotland.

In winning prizes this herd has by no means been playing the part of the laggart. At the Provincial held at Ottawa in 1879, with three cows bred by himself, Mr. Drummond had the high honor of capturing the silver medal given by H. R. H. the Princess Louise for the three best dairy cows. At Sherbrooke in 1885 they won, besides several individual prizes, the herd prize as well in strong competition. At the Provincial of last year Mr. Drummond was again successful in winning the bronze medal in the milking competition. The same year they were honored with the herd prize at Montreal, and coming on to Ottawa were there the winners of a like trophy. But this year even their glorious past record has been surpassed. At Kingston, Ottawa, and Toronto they took first and second on milch cows, first on aged bull, and bull of any age at Ottawa, and second at Kingston on the same. At Hamilton they won first on bull of any age and on aged bull, first on milch cow, first on bull and three of his get, second on year old bull, first on yearling heifer, and second on heifer calf. The crowning success of all has been, however, the herd prizes that have been won this year, as they secured no less than first at Ottawa, first at Kingston, first at Hamilton, and first at Toronto Industrial.

The farm comprises three hundred acres, all under cultivation, and the style of farming followed is that of mixed husbandry. The herd numbers seventy head of pure-bred Ayrshires. The farm is situated four miles north of Montreal; C. P. R. Mile End station is the nearest railroad station, which is about two miles distant. Mr. Drummond has on hand at all times young stock for sale, and owing to the great number kept can meet the wishes of all reasonable purchasers. The sales for the year have been many, among which we may mention that it was from this herd that the Dominion Experimental Farm at Ottawa made a selection of no less than five cows and heifers.

The General Purpose Stallion.

It is the universal practice throughout Ontario for our smallest fairs as well as our largest exhibitions to recognize this class, and make more or less allowance for them in their awards. This we hold is not only a needless expenditure of money, but is also harmful in its effects, inasmuch as it stimulates the production of a class of horses, useless in themselves, and worse than ciphers in respect to their breeding qualities.

The most complete definition of this anomaly that we have yet seen is given in the following words, taken from the prize list published by one of our exhibition associations: "A general purpose horse is understood to be a horse that is suitable either for the wagon, carriage, buggy, saddle, or plow." We have not a word to say against this clear explanation of the requirements of a stallion before he is worthy of the title general purpose, for the definition certainly covers all the ground, but what we do raise our voice against is the encouragement of a class of stallions that should not be recognized. The visitor from fair to fair has the fact pressed home to his mind that if the awards are made for this class for the purpose of establishing a fixed type of stallions possessing these many qualities required of them, they certainly fail woefully in their avowed object. The stamp of stallions that enter in this class vary greatly, just as the term general purpose horse varies with the requirements of each district in Ontario.

But what about the breeding of these stallions? Invariably they are nothing more than good grades by a heavy draught stallion out of a common mare. Now these stallions, ten cases out of ten, cannot be depended upon to transmit their few good qualities to their progeny. These attributes are not fixed by selection and careful breeding, and hence that paramount quality, termed prepotency, that has distinguished all valuable sires, is unknown to them. They may possess many personal attractions, but of what use we ask is any stallion, no matter how splendid in form, style, and quality, if he cannot be relied upon to transmit these to his progeny? Speculation at present is too rife in breeding without increasing it. It should be the breeder's aim to endeavor to eliminate, as far as possible, all chance work from his calling, and not increase it by the use of stallions of unfixed qualities through their breeding.

But the worse feature of the question is that these are the stallions that can afford to travel through the country stinting mares for what their owners may be pleased to pay for their services, and thus undermine the pure-bred stallions that must necessarily ask a higher fee. Our fair associations, by the prizes they offer and the honors they confer, must more or less aid in flooding the country with these cheap stallions of nondescript breeding. It is an easy matter for a jockey to fix up a stallion in good flesh, so that his failings in bodily structure may be mostly hidden, and as these general purpose stallions may be offered at a very cheap rate as they have cost their owners but very little to raise in comparison to what it costs the owner of a pure-bred stallion to assume proprietorship, it is not a matter for wonder that the former, in far too many cases, is given the preference. If our associations would withdraw their recognition of these stallions, and discountenance their production by not only refusing to provide prizes for them but also by giving greater encouragement to the owners of pure-bred stallions by larger prizes, we feel sure this would have a marked effect on public sentiment in this respect, and thus materially influence for the better our important industry of horse-breeding.

Fattening Sheep.

This branch of the live stock industry has received comparatively little attention at the hands of the Canadian farmer, especially in the winter season. It is one of considerable importance, or at least it might be made so. Lambs in this province are usually sold to the local butchers at about \$3.00 each in the autumn, when by following a certain line of management they might be made to sell for more than twice, or nearly five times, that sum before leaving the farmer's hands. Even now good lambs for the Buffalo and other United States markets will fetch readily \$5.00 in the autumn, but they are of a better quality than those which bring but \$3.00 each from our local butchers. There is no class of sheep better adapted for winter fattening than lambs which are ready for the market when about one year old. They need not of necessity come early, and will answer very well from common dams if from a pure bred sire of good individuality. The more rapidly they can be pushed along from birth, with a judicious haste only be it remembered, the more suitable will they be for the purpose of winter feeding. The ram lambs should be castrated when but a few weeks old.

They had better come to hand say in April or May, for then the percentage of loss of the young lambs is less, and their growth is likely to be continuous owing

to the plentiful supplies of grass. When they are weaned they should get a small grain ration in the field. This may consist of $\frac{1}{2}$ lb. oats, $\frac{1}{4}$ lb. wheat bran, and a little oil-cake each per day, which may be increased somewhat unless the pastures are plentiful. The aim should be to push them well ahead at this period, but not to fatten them, hence nitrogenous foods as oats and bran are the most suitable. The oil-cake may, or may not, be used at this period as convenient. It is of service in securing a laxative rather than a constipated condition of the bowels. Later, when the lambs are housed, it is valuable for laying on fat, in addition to its use in regulating digestion.

The lambs are housed when the ground becomes covered with snow, and the grain ration still further increased. It may be varied both in quantity and quality to suit the convenience of the farmer. Food grown upon the farm usually costs less than what can be purchased, and should therefore be fed where there is a supply.

A knowledge of the blending of these foods so as to make a proper ration is of much practical importance, otherwise much of the food will be wasted in the feeding. If either the nitrogenous or carbonaceous foods are fed in excess, the result stated above will follow.

Experience has hitherto been the sole guide of the farmer. Deductions from his own experience or that of some one else has directed him, and the wisdom of following such guides is certainly to be commended.

But we are by no means sure that the experiences of the Canadian farmer have here covered the whole ground. In fact we are quite sure that they have not. Many combinations of foods that may doubtless be fed with results that would be satisfactory, have not yet been tried.

In this we can see a fine field for experiment by the authorities of the Ontario Experimental Farm. When such experiments are undertaken they should have a due regard to the foods that are usually grown upon Ontario farms. To know about a suitable food ration of what is grown plentifully here, is of far more importance to our farmers than to know about one composed of foods, which in large measure have to be bought, and in some instances brought in from other countries.

Without desiring in the least to under-estimate the value of cotton seed meal and corn meal as food factors, we hold that it is vastly more important that our farmers should know how to feed peas, oats and barley to the best advantage, than to know the same about the former, because peas, oats and barley are likely in all time to form leading food factors in the fattening done in Ontario.

Different rations might be named for winter feeding of such as the farmer raises, but a mixture of peas, oats or barley, bran and oilcake, will answer very well along with some roots, good pea straw and clover, or clovery hay. The grain ration should vary as the feeding season progresses. The quantity of oats should predominate at the commencement of the indoor feeding season, and the quantity of peas should gradually increase, while the oat ration may remain stationary; the oilcake also should increase as toward the close of the feeding period; the object is to lay on fat rapidly, for which purpose both peas and oilcake are very well adapted. Alsike clover is very suitable, being finer than the common variety, and, therefore, more relished by the sheep. One feed of good pea straw per day will answer very well if fed in the morning, the residue being used for bedding.

The supply of water should be constant, as unless a quantity of roots larger than is necessary is fed, they will require a large amount of water.