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DOMINION.

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pasture grass to sow with the regular mixture in this part. So far the orchard grass promises well, although a mixture of this with one of the others may be decided upon for next year.

Apropos of the above-mentioned test of grasses, some investigations of the Experimentalist, Prof. Zavitz, on this point, will be in order:

For the past four years an interesting experiment has been carried on by the Experimental Department in comparing different pasture crops. In all, sixteen varieties of grasses and five varieties of clover have been tested. Previous to this year the growing plots of grasses and clovers have been cut six times during the summer, and the yields at each cutting were carefully weighed and noted. From the aggregate of these cuttings, the total value of the crops as pasturage was ascertained. This year a different plan is being followed. Half of each of these plots was fenced off when the crops had made sufficient growth for pasturage in the spring. On May 17th three sheep were turned onto this pasture. The sheep were left on it till May 25th. The fence was then removed to include the whole of the plots, and two steers were pastured on the plots from May 27th till June 2nd.

It was observed from this first test that the sheep ate down the timothy best, and the tall oat grass second best. The sheep seemed to like the tall oat grass fully as well as the timothy. This fact is significant, since, by experiments of the last four years, tall oat grass produced the greatest yield of pasture crop of any of the grasses in the test. Orchard grass was also well eaten by the sheep.

The cattle seemed to have a decided preference for the tall oat grass, and had it all eaten down by the end of May. They also fed upon Canadian blue grass, timothy, awnless brome, and red top, in the order named.

From this first test there is an indication that tall oat grass, orchard and some of the brome

grasses are going to become valuable additions to our pasture crops in Ontario. These grasses are succulent, rapid-growing varieties, that do well in comparatively dry seasons.

In the clover tests the sheep and cattle seemed to show a preference for alsike and common red.

Similar tests are to be conducted at intervals throughout the summer, and the final results will be awaited with interest, since some of the new varieties of grasses are giving promise of good yields and usefulness in our Province.

The Experimental Department is also carrying on other new work, a review of which will be presented to our readers a little later.

In the Dairy Department, Prof. Dean explained a system of stable ventilation which gave excellent satisfaction last winter. A description will be published later. A system of watering basins, installed lately by the Metal Shingle and Siding Co., of Preston, is being tried along one row of cows. The feature of the basin is a button which unscrews at the bottom, permitting the vessel to be easily flushed out.

In the Manufacturing Department butter is being made this summer by the sweet-cream process, which Prof. Dean considers the ideal way. The practice is to take a rich cream of about 35 per cent. fat, pasteurize it, and run it immediately into the cooler, where its temperature is lowered to 45 or 46 degrees, when it is churned at once, after the addition of a starter. In reply to a question, we were informed that they are now investigating the need for a starter, as it is by no means clear that its addition so soon before churning is of any particular advantage. We must, however, await further experiments before pronouncing on this point. Discussing the somewhat critical comments in some quarters upon the claims made for sweet-cream buttermaking, the Professor pointed out that some of the critics had overlooked the fact that pasteurizing prevented the development of injurious germs, and hence obviated the necessity of ripening to control the flavor. Judged by results, the sweet-cream butter is superior to the ripened-cream product, the former having a mild, pleasant flavor, which is preferred by the great majority of those who have compared the two, particularly the girls of the Macdonald Institute (who should be connoisseurs). It is also claimed that the sweet-cream butter has better keeping quality. In the Home dairy there are now seven makes of hand cream separators and one turbine. The latter is recommended for a herd of 25 to 50 cows.

Without mentioning the remaining departments specifically here, we may note that the teaching has progressed very satisfactorily during the past year, the discipline being even better than in former years. This may be due to the fact that the responsibility is largely thrown upon the student body, who, in the main, are orderly and gentlemanly, and who co-operate with the staff in insisting upon satisfactory conduct. One cannot visit the school without feeling that it is a very wholesome place to send a boy.

At the time of our visit no one had been chosen to fill the places of Profs. Lochhead and Harrison, though applicants are numerous. It is intended, President Creelman informed us, to secure first-class men, preferably Ontario boys who have got their training at Guelph and have since had some experience abroad. In the Biological Department it is likely that some new arrangement will be made, by dividing the work, employing as head a specialist in botany and zoology, and assigning the botany to a lecturer, or vice versa, looking ultimately to the employment of two heads over two distinct departments. Prof. Lochhead severs his connection with the O. A. C. this month to join the staff of Sir Wm. Macdonald's College, at Ste. Anne, Que. Indications point to a record attendance this fall at the O. A. C., the number of applications already in being unprecedented for the time of the year.

A trip to the College is now incomplete without a visit to Macdonald Institute and Hall and to the Macdonald Consolidated School, which stands at the corner to the left as you approach the College campus from the city. Back of the building is the school garden, which, as is well known, forms a feature of the Macdonald

Schools. There are both individual and class plots, as well as experimental plots in connection therewith, all neat and well kept. Attendance has kept up remarkably well, the percentage being 92 per cent. of the enrollment in April, and 95 per cent. in May. The School has been visited by a great many people, including a deputation from the Niagara Peninsula, who, it is said, travelled all through the district without meeting one person who could find any fault. An even more encouraging evidence of the popularity of the school is the fact that another section, viz., No. 6, Guelph, is coming into the consolidated district when the school opens after the summer vacation.

HORSES.

Cervical Vertebra Dislocation.

To the Editor "Farmer's Advocate":

Sir,—I beg to return my sincere thanks for calling my attention to the case of dislocated cervical vertebrae in colt. It was not my intention to make any comment on cases of this kind, except so far as veterinary annals are concerned. On enquiry to the editor of the Veterinary Record, a paper devoted to veterinary practice, I find there is no record over the name of a qualified veterinary surgeon of complete recovery from a true dislocation of cervical vertebrae. The fact that the injury is so common, and no authentic cases of complete recovery, makes the one reported unique. If Dr. McVicar, V. S., will send me full particulars of case, also state of colt at present, I will promise that it shall go on record. Mr. I. P. McVicar states that his Thoroughbred colt dislocated the sixth cervical vertebra. This is manifestly incorrect, and could not happen without immediate death, as this bone has no inferior spinous process, and the transverse processes are triped, consisting of three eminences, and cannot be dislocated without fracture, even in the dead subject. It is only between the third and fourth or the fourth and fifth that dislocation can occur and recovery take place. The accident is very common, complete recovery rare, and many conditions were favorable in the cases reported. The horse is aged, in poor condition, the accident soon discovered, the treatment prompt, and good help plentiful. Since reporting this case, a horse, the property of Mr. Edwards, Bracondale, met with the same disaster, but, notwithstanding every effort to restore the neck to its normal condition, the animal had to be destroyed.

Toronto. WM. MOLE, M.R.C.V.S.

Draft Horse Breeding.

English farmers favor the Shire as the best horse for the farmer to raise for work and to sell. A Live-stock Journal correspondent thus urges the merits of Shire horse breeding:

It is evident, in the first place, that the best draft horse will be the last to feel the effects of the motor on the road, notwithstanding the fact that motor plows, wagons, etc., are already in the field. But there is one advantage in a sound young horse which a machine does not possess, viz.: that the horse increases in value up to six or seven years old, if it is in anything like good hands, which the motor never does, be it ever so skillfully handled, and there is a feeling of satisfaction about owning stock—whether living or dead—which is increasing in value which cannot be felt over that which is continually decreasing.

Further, the initial cost of setting up horseless machinery is considerable, and quite beyond the reach of a small farmer; whereas a Shire may be bought which breeds a £500 stallion, one such instance having come under the writer's own notice, and instances are recorded of a Shire foal being bought for less than twenty sovereigns which afterwards made a thousand. No horse-hater can claim similar results from a machine made of iron and steel, without entire reconstruction. In these days it becomes increasingly necessary for a farmer who wishes to make a living to stock his farm to the full, so that he can make the most of his produce without depending on receipts by the sale of hay and grain, and it is obvious that two or three roomy Shire mares will give as little trouble as anything else, either summer or winter, and, of course, they will cheerfully do most of the work needed on an ordinary farm.

With regard to selling, a good deal depends on the nature of the holding. If it is small, then it may be best to sell the young stock as foals, and for this purpose the best sires should be used for mating with registered dams, so that the youngsters are given every possible chance of turning out "trumps," and paying for the dam and fees twice over. But the owner of sound, low-grown mares, unregistered and on the small side, need not use any screw of a stallion that comes along. Rather select one with "feet,