

DETERMINING THE AGES OF CATTLE.

Disputes frequently arise at fairs as to the eligibility of a certain animal to compete in a certain class. It may be alleged that the animal is over the age limit for that class, and, while the exhibitor may produce a pedigree for it, in case the class is a pure-bred one, it doesn't always happen that the pedigree is taken as conclusive proof of age. To overcome these difficulties, and to provide something for judges to use in the ring as a basis for determining the age of cattle, the management of the International Exposition have adopted the following mouth specifications, which applies to cattle between the ages of twelve and thirty-nine months:

Twelve Months.—An animal of this age shall have all its milk (calf) incisor teeth in place.

Fifteen Months.—At this age center pair of incisor milk teeth may be replaced by center pair of permanent incisors (pinchers), the latter teeth being through the gums, but not yet in wear.

Eighteen Months.—The middle pair of permanent incisors at this age should be fully up in wear, but next pair (first intermediate) not yet cut through the gums.

Twenty-four Months.—The mouth at this age will show two middle permanent (broad) incisors fully up and in wear, and next pair (first intermediate) well up, but not in wear.

Thirty Months.—The mouth at this age may show six broad permanent incisors, the middle and first intermediate pairs fully up and in wear, and the next pair (second intermediate) well up but not in wear.

Thirty-six Months.—Three pairs of broad teeth should be fully up and in wear, and the corner milk teeth may be shed or shedding, with the corner permanent teeth just appearing through the gums.

Thirty-nine Months.—Three pairs of broad teeth will be fully up and in wear, and corner teeth (incisors) through gums, but not in wear.

A WASTING DISEASE IN IRISH CALVES.

During the past few years an investigation has been carried on by J. H. Norris, V. S., in Co. Wexford, Ireland, on behalf of the Department of Agriculture, regarding a destructive wasting disease of calves which has caused great loss to farmers in that and other parts of the country. Medicinal treatment was of little or no avail, but promising results were obtained in field experiments designed to keep the calves by themselves for their first year on fresh grass, or, if no grass were available, by top-dressing an old paddock with lime or salt. To substantiate the results of preliminary experiments, a series of experiments was commenced in 1907, and carried on by the Department on eight farms during last summer, and until the early summer of 1908. As there was no fresh-grass paddock available on any of these eight farms, salt or lime was applied as a top-dressing, the farmers agreeing to observe the following conditions:

1. The calf paddock, from the day on which the dressing of lime or salt is applied, is not to be used by any other animal (horses excepted) but the calves used in the experiment.

2. The calves, from the time of birth until they are put on the dressed paddock, to be housed.

3. The calves not to be allowed to mix with any other cattle.

With the exception of the observance of the above directions, the animals were treated in a similar manner to that of preceding years when the mortality prevailed. Ninety-two healthy calves were reared without loss on eight farms which, in previous years, showed a death-rate from the disease averaging 30 per cent. of the total number reared. From these experiments, it would appear that fresh ground is advisable for calves, as well as for poultry and sheep, and we might add horses and swine.

THE FARM.

GOOD-FARMS COMPETITION IN MANITOBA.

The Manitoba Department of Agriculture, last winter, through the managing director of Agricultural Societies in the Province, announced that money granted by Agricultural Societies as prizes for a good-farms competition would be duplicated by the Department. Seven Societies took advantage of the offer, and eighty-eight farms were entered in the competition, inspection and scoring of which was concluded the first week in August.

A most elaborate score-card, covering details under every feature of farming operations and conveniences, was used. The main divisions included general appearances, house and surroundings, garden, outbuildings and yards, water supply, shelter-belts, fields and crops, live stock, machinery, management, and improvements. Indications of interest in all departments and evidences of prosperity were given special prominence. The balanced farm naturally had the advantage. Success in fighting noxious weeds and general methods of cultivation also were considered important.

The judging was done by members of the Manitoba Agricultural College staff, assisted by the Deputy Minister of Agriculture. Each farm entered was scored separately, and four prizes were given in each district in the order of the scoring, the score varying from 788, the highest in the whole competition, to 599, the lowest. The highest score was that for the farm of Mr. Stephen Benson, of Neepawa. Keen interest prevailed in every center, farms presenting a more attractive appearance than they had in any previous year, much-needed improvements having been made, and everything possible done to improve appearances and to have the honor of being marked high by those entrusted with the task of passing judgment.

Although the same score-card was used throughout the Province, the totals may not show which farm would win in a Provincial sweepstakes contest. Allowance must be made for the season of the year at which the scoring was done, judging in the first competition being done about a month earlier than in the last. A special feature in the management of the highest-scoring farm was that of the provision made for retaining hired help the year round, Mr. Benson having provided two houses for married men, and being so well satisfied with the result that a third house is being arranged for.

The matter of prize-farm competitions, which was adopted some years ago by the Council of the Ontario Agriculture and Arts Association, with excellent results, may well engage the attention of Agricultural Societies and of the Department of Agriculture in all the Provinces as one means of stimulating farmers to improvement in their methods of management and in the general appearance of their farms.

MANY CONVERTS TO THE SILO IDEA.

With a few seasons like that of 1907 and 1908, our farmers have been taught to appreciate the corn crop, and those who, in no uncertain tones, a few years ago, denounced the corn crop as a land impoverisher, the silo as a costly institution, and silage as only an apology as feed for our live stock, "on account of its watery and acid condition loosening the teeth of our cows," etc., now speak in glowing terms of the corn crop and the merits of the silo and silage—nothing like experience to remove the prejudices so characteristic to human nature. Many new silos are being got ready for this season's corn crop. After over sixteen years' experience with the silo, we believe it has come to stay, and it is gaining ground rapidly among our dairymen. To drive through many sections of the Eastern Town-

ships, the Counties of Chateaugay, Beauharnois and Huntingdon at the present time is a revelation to the visitor, for, to see acre upon acre of tall, green, wavy corn just tasseling out makes the traveller think he has been transported to a section of the corn belt of the Middle States. The problem of harvesting has been largely overcome, as, with the co-operative system of filling the silo, where an engine and blower is used, the work is done quickly and satisfactorily.

Huntingdon Co., Que. W. F. STEPHEN.

DILIGENCE TO COMBAT THE WEED EVIL.

It is only right to call attention to one phase of our agriculture which is very seriously neglected, and that is the increased number of varieties and the spread of noxious weeds, without any effective means being taken to prevent their getting a foothold or to eradicate them when they once get in. In some sections this is getting almost intolerable, for, with mustard, sow thistle, chicory, quackgrass and, lately, bladder campion—all growing in the fields—the results, in a few years, if aggressive measures are not soon adopted, will be disastrous to our agriculture. Farms that were comparatively free from noxious weeds a few years ago are now overrun, lessening the crop return, and to eradicate them will take much labor and patience. While many farmers are most diligent in fighting this weed evil and preventing the plants getting a foothold on their lands, others allow them to grow with impunity, having no regard for their own or their neighbors' welfare in this respect. The seeds, blown with the wind or carried by the birds, soon pollute the cleaner lands of this more-diligent neighbor. Such a state of affairs is allowed to exist under our modern laws and conditions of agriculture, and the farmer who desires to keep his farm free of these weed pests must exercise extra diligence if he wishes to have a clean, productive farm.

Quebec.

HARVESTING AND DISPOSING OF THE CORN CROP.

(Prepared for "The Farmer's Advocate" by G. I. Christie, Superintendent of Agricultural Extension, Purdue Agricultural Experiment Station, Lafayette, Indiana.)

Three important problems confront the average corn-grower. The first is that of securing the largest yield of corn of the best quality from each acre of land devoted to the corn crop. In articles already published in "The Farmer's Advocate," the different phases of this problem, "Corn Production," have been considered.

The second is that of harvesting the corn crop in the easiest and most economical way. With a scarcity of farm help, and the high prices that must be paid for labor, it is necessary that the corn-grower seriously consider the most profitable way of handling the crop. The more important practices followed in the American corn belt at the present time will be discussed.

The third problem is that of disposing of the product for the largest net profit, and still returning to the soil a maximum amount of the elements of fertility removed by the corn crop. In the sale of the crop from the farm, corn-growers must not only consider the actual selling price of the corn, but also the future welfare of the soil. They recognize that, in order to grow maximum corn crops from year to year, the fertility of the soil must be maintained. With a knowledge of the large amounts of nitrogen, phosphoric acid and potash contained in an average corn crop, they readily see that the practice of selling the grain direct to the elevator and returning nothing to the land, must bring early and certain ruin. Most corn-growers appreciate these facts, and are acting accordingly. Figures compiled by the United States Bureau of Statistics on the uses of the corn crop show that more than 80 per cent. of the corn crop of the United States is fed on the farm. While it is true that some of the corn is fed on other farms than those on which it is grown, yet it is evident that the amount of corn fed on the farms of the corn belt each year is increasing. However, notwithstanding all this, there are demands for corn for the glucose and starch factories, distilleries, and export trade, that must be met. For these purposes, more than 500,000,000 bushels of corn are sold from the farm annually.

The methods employed in handling the corn crop vary according to the purpose for which it is to be used. Where the grain only is to be used, the plan of harvesting is different from that where both grain and stalk are utilized.

HUSKING FROM THE STANDING STALK.

The larger part of the crop is husked by hand from the standing stalk in the field. The husking is done during November and the early part of December, after the corn has thoroughly matured and has dried, so that it can be safely stored in large, slatted cribs or pens made from



Shredding Corn on an Indiana Farm.

(Photo by courtesy International Harvester Co.)