

earthenware plates of the same size. Cut out two circular layers of flannel somewhat smaller than the plates. Between the two layers of flannel place 100 seeds of the variety to be tested. Moisten the flannel with all the water it will absorb. The two layers of flannel are placed in one plate and covered with the other and set in a warm place. If the flannel be thin, several pieces should be used in order to absorb sufficient water. Other kinds of absorbent cloth or blotting paper can be used, but thick flannel is rather more satisfactory. At the Kansas Experiment Station we have used damp sand for a seed-bed with good success. The dishes should be placed in a room which is kept warm at night, or at least where the temperature does not fall to freezing. The flannel should be kept moist by the addition of more water when necessary. Some seeds will commence to germinate by the third day. Each day an examination should be made, and those seeds which have germinated should be recorded and removed. For practical purposes two weeks is sufficient time for the test. The results obtained may be considered as representing the per cent. of vitality under favorable conditions. The per cent. germinating in the ground is likely to be less. In counting out the 100 seeds, care should be taken to discard poor or shriveled seeds and the seeds of weeds or other plants which may be present.

Grass seeds require as much as three weeks, and seeds of some trees a still longer time. Beet balls contain from three to seven seeds. With very small seed, it may be necessary to provide for the circulation of air by placing small pieces of wood between the layers of cloth and the seeds. With most varieties of garden plants the majority of seeds should germinate within a few days after the first sprout appears. If the period of germination extends over a longer time, it shows that the vitality of the seed is low. Seeds of the carrot family and some melon seeds may not show as high results in the germinating dishes as they do in the ground. Below is given a list of common seeds, with the average number of years that they will retain their vitality (taken from Professor Bailey's Horticulturists' Rule Book):

Bean 3, beet 6, cabbage 5, carrot 5, celery 8, cucumber 10, Indian corn 2, lettuce 5, musk-melon 5, onion 2, parsnip 2, pea 3, pumpkin 4, radish 5, summer squash 6, tomato 4, turnip 5, water-melon 6.

## New Brunswick Farmers and Dairymen

Specially Reported for Farming.

The annual convention of the Provincial Farmers' and Dairymen's Association of New Brunswick took place at Fredericton on Feb. 27th and 28th and March 1st, which was one of the best ever held in the province. The first meeting was held in the large Y.M.C.A. hall, but owing to the large crowd of people it was thought advisable to hold the next meeting in the Normal School building. President John McLaughlan, in making his annual address, referred to the operations of the association during the year, which he thought had been very beneficial to the farmers, who were rejoicing over the bountiful crops which had been gathered by them during the past season. He then referred to the Institute work of which this association had been relieved by our local Government. Many meetings had been held during the year in every county in the province, and at the request of the association the Government had sent a practical orchardist to visit the farmers and give instruction in this line of work.

In his reference to stock he thought that great progress was being made except in the breeding of sheep, which was not increasing very much owing to the great losses caused by dogs. It seemed to him that many farmers who persisted in keeping these worthless curs preferred them to a fine piece of mutton.

### EXHIBITIONS.

Exhibitions had been held at St. John, Woodstock, Sussex, Sackville, Bathurst, Centreville, Glassville, as well as in other places which he was not in a position to attend. He thought a greater interest was being taken by our farmers in this connection, and a grand improvement, as also being made in the class of stock put on exhibition. Prizes, he said, that a few years ago were carried away to the upper provinces, now remained in the Maritime Provinces. This reference was made in connection with the St. John exhibition.

At the local shows nearly every class showed a marked improvement over previous years.

The speaker made special reference to the grand and rapid development of the dairy industry in nearly every county, and he thought that next season would show a still larger make than even this one has.

The new creamery, which was established last season, had done a grand work, relieving the market of a very large quantity of dairy butter which neither paid the farmer to manufacture nor suited the tastes of those who used it. There is nothing like making a class of butter suitable for export, for which high prices can be obtained. The president then thanked the officers of the association for the assistance they had given him, and hoped that those who had been sent as delegates would return to their homes much better fitted to grapple with the different problems of farm life.

HON. CHAS. H. LA BILLOIS,

Commissioner for Agriculture, was then called upon and expressed his pleasure at being able to attend the convention. As head of the agricultural department he would give the meeting some idea regarding the work done by himself and staff. The wheat policy which was adopted by our Government in 1897 had been the means of greatly increasing the growth of that crop, and as a result twelve new modern roller mills had been established in different sections of the province which were turning out about 500 barrels of flour per day. The increase in the production of wheat last season was about 100,000 bushels in excess of 1898, and the yield per acre was 18.1 bushels, being one bushel more than the average for the Province of Ontario. He thought that had it not been for the great gale which swept over the northern portion of the province the yield per acre would have been 20 bushels per acre.

Turnip seed was being imported from England by the department and distributed over all sections at cost price; the same thing was being done with seed wheat every spring, which was giving general satisfaction.

In the live stock department he thought a much greater interest was being taken. Pork and poultry were being raised in much larger quantities than formerly.

### DAIRYING.

Creamery butter had made a grand showing this season, both in price and quantity, an increase of 205,000 pounds being made. About three-quarters of the output of our creameries was being exported to the old countries at high prices, which showed upon what a high plane the industry was being developed. He then referred to the new creameries and cheese factories which had been established last season in Madawaska, King's, Carleton and Westmoreland counties and was glad to be able to say that all lines of agriculture were being developed, not only in a few counties, but in every county in the province.

In his reference to the Provincial Dairy School he said that it was being managed by our own officers, and he was proud to say that the school had proved a grand success. Deputy-Commissioner Peters, he said, had rendered him valuable services since he took charge of the office and he spoke of the grand exhibit Mr. Peters had secured in the shape of all kinds of grains and fruit for the Paris Exposition which he knew would give New Brunswick a grand showing when it was arranged.

The commissioner then spoke of the agitation for an agricultural college for the Maritime Provinces, which he