The Farmers' Parliament of New Brunswick.

[Specially reported for the FARMER'S ADVOCATE by J. J. Ferguson.]

The twenty-fourth annual convention of the N. B. Farmers' and Dairymen's Association held its sessions at Fredericton, March 28th-30th. There was a large and most encouraging attendance of interested farmers from all over the Province. As evidence of this, there were fees received from no less than one hundred and ninety-five members.

The President, Major Montgomery-Campbell, in the course of his opening remarks referred to the very satisfactory progress N. B. agriculture is making along many lines. Under the wise policy of assistance pursued by the Government, the dairy industry is being surely, if slowly, developed. During the present winter a large interest had been ing the present winter a large interest had been aroused, both among the farmers and the capitalists of the country, regarding the establishment of a pork-packing factory at some central point. If such were in operation, it would provide a cash market and outlet for many times the number of hogs raised in the country under the present unsatisfactory condition. If this country is going to secure a place in Britain's markets, she must be able to produce in quantity for export all her staple products. New Brunswick has been most bountifully supplied by Nature with most favorable climatic conditions and a soil of a character varying sufficiently to permit of the successful culture of all our ordinary crops. At present there is by far too much importing of coarse grains and feed stuffs from the western Provinces. These might easily be produced at home, resulting in the keeping of the money necessary to purchase them at home in the pockets of the farmers. The farmers themselves are not thoroughly alive to the great possibilities for successful work here in their own Province. Major Campbell endorsed most heartily the work being done by the Provincial Government, jointly with the Farmers' and Dairymen's Association, in the holding of so many Institute meetings over the Ontario had already reaped a large reward from her work along that line, and without doubt great good would follow the wakening-up of the people of New Brunswick. At the conclusion the people of New Brunswick was the Description to the people of New Brunswick. of his address, the President introduced His Honor Lieut-Governor McLelan, who briefly referred to some of the things which he thought should be done to advance the interests of the "noblest band of workers in the world." Something should be done in the way of introducing the teaching of practical agricultural knowledge in the schools. Ontario had recently taken a step in the right direction.

tion along this line. New Brunswick would surely be ready to follow her lead.

Hon. C. H. La Billois, Commissioner of Agriculture for New Brunswick, followed with an eminently practical talk, reviewing the situation as it is at present and referring to what he hoped to see done in the future. Last year, owing to the policy of encouragement pursued by the Government, there had been raised in the Province 100,000 bushels more of wheat than were grown the previous year. Last year the make of cheese totalled 825 tons, a very respectable amount indeed, considering that ten years ago there was practically no cheese made in the Province. The splendid Provincial Exhibition held at St. John in '98 showed that the country was making rapid progress. Ten years ago such a show would have been impossible. While most decided improvement had been made, N. B. is still far behind her sister Provinces to the west. The Government is willing and anxious to do everything in its power to foster the development of agriculture, but the farmers must do their part. The Government is resolved to carry out its present agricultural policy, and will as far as possible meet every reasonable request of the farmers, as expressed through their representatives in this Farm-

ers' and Dairymen's Association.

Economic Maintenance of Soil Fertility.—This was the title under which Prof. Shutt, of the Dominion Experimental Farm staff, delivered a most able and practical address. In his opening remarks Mr. Shutt warmly complimented the members upon the success of the convention, which in previous years he had found to be one of the very best in the whole Dominion. He said: "In the first place, is farming a paying business? Answers to that question would differ widely. Is it a game of chance? Most decidedly not. To secure success, there must be found the right quality in four factors—the man, the soil, climatic conditions, markets."

The Soil.—How can we maintain and increase its store of available plant food? If we can expend five dollars on artificial fertilizers and get a crop in return worth ten dollars, we are economical in the best sense of the term. Our soils are composed of mineral and organic or vegetable constituents. These latter are highly essential, as is also water, since the food of plants is taken up in solution through the juices in circulation. Plants derive the greater part of their starch and sugar from the air, without cost to us, but it is our work to supply the essential constituents which are taken directly from the soil. Our work must be chiefly directed towards supplying nitrogen, phosphoric acid, and potash, not only in sufficient quantity, but in readily available form. Mr. Shutt dwelt on the fact that even with this condition right, successful crop-production was still largely dependent upon the mechanical condition of the soil, as well as its power to absorb and retain moisture. The great necessity for fine and deep cultivation to extend the area of root-feeding was clearly shown.

Clover as an Agent. — For the cheap maintenance of humus and its accompanying nitrogenous fertility clover stands pre-eminent. In our farm practice we should always remember that the clovers are nitrogen gatherers, while our cereal crops are nitrogen consumers. Nitrogen purchased through the medium of artificial fertilizers costs, on the average, three times as much as phosphoric acid or potash, viz., 15c. per lb. Prof. Shutt strongly advised the sowing of eight to ten pounds of clover per acre with all spring grain seeding, even if the land is to be plowed in the fall or next spring, as the clover would add much to the fertility of the soil

Standards of Judging.—Dr. Twitchell handled this subject in an able manner. In his opinion, each of our breeds should be judged more upon the basis of conformity to a certain standard of performance or utility with a definite object in view, than upon the various class standards set up by partizan breeders. Mr. Robertson, of the Nappan Farm, contended otherwise, holding that the men who were handling a breed and developing it were best qualified to decide what was required in or from that breed. If people cannot find what they want in one breed, they will simply look for it elsewhere. Each breed, as we now have it, is the result of years of patient work on the part of men who were working towards an ideal type, from which was ex-

pected utility in the highest degree.

"Experimental Work at Nappan Farm" was dealt with by Supt. Robertson, his sympathies being strongly with the dairy business; his address referred mainly to work along that line. To care for his cows cost six to eight cents per day. Profits ranged from +28 to -20 cents. The skim milk was credited 12½ cents, while the pigs which consumed it returned 18 cents per 100 lbs. Two objects had been sought—the marketing of the coarse fodders of the farm at a profit, and increasing the fertility of the farm. The cows are prisoners in the stables from fall until spring, the temperature being kept at about 65°. Mr. Robertson advised strongly against the use of a continuous system of troughs or connected buckets for watering in stable, owing to the liability of transmitting contagious disease. His cows drink from individual buckets, filled by hose from convenient hydrants.

Experiment with Steers.—Twenty head—four each of Herefords, Polled Angus, Durhams, N. S. grade Durhams and scrubs—were fed 105 days, commencing Dec. 1st. Varying rations, made up of turnips, corn silage, broad-leaf hay, bran, cotton-seed meal, peas and oats and hay were used Gains averaged 1% pounds per day. Profits totalled \$297.90, or 1½ cents per 1b. live weight, which came from the increased value of the original weight, not from profit on the making of flesh or fat. While the scrub steers made as good gains per pound of food fed as did the well-bred steers, they would not make anything like the same net profits; sold as they were, on their merits, they were worth about a cent. and a half less per pound live weight. Foods were valued—hay, four dollars, and meal (average) twenty-five dollars per ton.

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Feeding Dairy Cows.—At Nappan they get but two feeds per day. They are feeding about eight hours and resting sixteen out of twenty-four. During June, the cors are out day and night; July and August they are in during the day and out at night. Peas, oats, vetches, corn and clover are all used for soiling crops in their season. Supt. Robertson believes that the high temperature at which his stables are kept in winter results in greatly increased production. (Is it not probable that such hothouse conditions might ultimately result in greatly weakened constitutions?)

Swine Raising.—An entire afternoon and evening of the convention were devoted to this subject, which is at the present time attracting so much attention from the Maritime farmers. At present almost nothing is done in the business on what might be termed a commercial scale. The strongly endorsed expression of the convention was that the time had come when New Brunswick farmers must reach out for a larger market. This could only be done through the medium of one or more large packing-houses handling bacon and hams in sufficient quantity to cater to and hold a line of export trade. The small local houses in the Province do not appear to be doing this, although the quality of their products is high. Dairying is but well begun in the Province—825 tons being the total make of cheese last season. With its extension the farmers rightly believe they can proportionately increase their production of hogs. Your correspondent outlined the best methods of swine husbandry followed in Ontario, and tried to impress upon the farmers that if they hoped for profits in the business they had better depend less on coarse grains and mill-feeds brought down from the west. They were advised to try clover, which does remarkably well in many districts for supplementary summer feeding, and mangels and turnips as the staples for cheap winter feeding. The greater number of the hogs now marketed in the Province are unfit for an export bacon trade, being either too light or too heavy. On St. John market there is an active demand for hogs dressing 100 to 125 pounds. Premier Emerson and Commissioner LaBillois are resolved to do all in their power to encourage and develop the new industry, so that it is more than probable that within two years John Bull will be enjoying "choicest Canadian pea-fed bacon" made in New Brunswick.

The Cheese Trade.—Mr. G. J. Dillon explained the superiority of Island cheese by stating that it was due to great care on the part of the patrons

(who usually own the factories) in supplying firstclass milk; to the better equipment of the factory buildings (many of them being supplied with insulated curing-rooms or sub-earth ducts), and to the fact that experienced men under Prof. Robertson had placed the work on a sound basis. To secure uniformity of size he advised the use of a 141-inch hoop, turning out 30 or 70 pound cheese.

Professor Robertson, speaking on the lack of uniformity in the color of cheese, said it was due to the use of too much acid or curing the cheese at too high temperature; it should never go above 65 degrees. The average summer temperature of England was only 61½ degrees, hence the more constant uniformity in her cheese products. To be able to completely control temperature, he recommended the installation at the factories of the system of cold storage as planned by the Department of

Agriculture. Selection of Seed, Etc.—At a large public evening meeting, Prof. Robertson, in a lengthy and able address, outlined the work he proposed doing in connection with his "illustration station" scheme. That they are an assured thing was shown by the fact that a sum has been placed in the estimates this season sufficient to commence the work on a modest scale. Prof. Robertson explained that they were to be not so much local experiment stations as practical object lessons. At Guelph, splendid results had followed careful selection of seed; this is to be one of the features of the new stations. The "chicken fattening stations" experiments of last year had been so satisfactory that a number of new stations—several in the Maritime Provinces—would be located this season.

Agricultural Education was the sole topic discussed at the closing session Thursday night. Dr. Twitchell, in a resume of the whole question, made a good impression. Mr. W. W. Hubbard, Mr. Adams, of the Normal School, and President Harrison, of N. B. University, delivered short addresses, urging upon the farmers the great necessity of giving the boys a chance. The University Senate is working for the appointment of a professor of agricultural chemistry, who could give instruction to the future teachers of the country upon this subject, and so prepare them to pass it on to the boys and girls. Your correspondent was proud to hear that Ontario is looked upon as a model in all these matters.

Fredericton, N. B., March 30th.

Crossing Beef Breeds with the Buffalo.

Mr. Mossom Boyd, of Bobcaygeon, County of Victoria, Ont., is, we understand, conducting a series of interesting experiments in crossing Polled Angus cows with a pure buffalo bull, with the dual object of stamping these cattle with the robustness and vigor of the bison, also, and chiefly, of producing hides carrying heavy coats of hair from which a valuable class of sleigh robes may be made, which will combine size, strength and durability in a high degree. The produce of this course of breeding are said to be very large and thrifty and to have the fore parts of the buffalo strongly marked in their make-up. Experiments on a less extensive scale are being made in crossing the Hereford cows with the buffalo bull. The result of this innovation has not been sufficiently tested, we belive, to indicate with any considerable certainty whether it will be a successful venture or not, but another experiment in breeding which is being made at the same establishment, and which has proved eminently satifactory, is that of crossing the two beef breeds, Herefords and Polled Angus, to produce good feeding cattle, the bulls of the latter being mated with cows of the former, with excellent results, a splendid class of polled Herefords being the outcome, and being uniformly thrifty, good feeding and early-maturing animals. If Mr. Boyd succeeds, as the probabilities indicate that he will, in establishing a superior breed of beef cattle without horns, he will have done much towards solving the problem of producing a class of cattle well suited for ranching purposes and the export trade. Of course, the crucial test of the experiment will come in the effort to continue the crossing judiciously so as to succeed in fixing a type that will reproduce with a reasonable degree of uniformity, and it is here that intelligent skill will be required. We shall watch with interest the results of this enterprise, and cordially wish Mr. Boyd success in his laudable undertaking.

Small, Thick-Fleshed Animals Now in Demand.

The partners in one of the leading firms of butchers in Llandudno, in Wales, have just published an interesting circular in which they give prominence to the announcement that the beast which is at present in most demand, and for which they are prepared to give the highest price, is the small, compactly-made animal, which carries a thick covering of flesh on the best parts, and yields nicely-marbled beef—that is, beef in which the lean and the fat are uniformly intermixed. The demand for over-fed cattle of all sizes has, they say, become a thing of the past; the big cattle will have to follow. The value of fat cattle will, they contend, be regulated in the future by their size and thickness. The best traders require the smallest cattle they can get, provided they possess the necessary thickness of nutritious, lean flesh, covered with a reasonable amount of fat. Cattle of this description, weighing in careass 600 or 750 lbs., command the largest prices, while similar cattle, weighing 750 to 900 lbs., come second.—Farmers' Gazette.