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The Butter and Cheese Trade

A very large make of both butter and cheese is generally reported. From the 1st of May up to June 14th the exports of cheese from Montreal increased by over 100,000 boxes as compared with the same period of 1898. If this rate of increase keeps up, the present season will witness the largest make of cheese that this country has ever had. This largely increased make is beginning to have its effect upon the British markets, and the English cable has dropped several shillings during the past few weeks. But, as our market review shows, this lowering of values has greatly increased the consumption of cheese, resulting in a steadier feeling. It is reported that if it were not for short sales prices on this side would be much lower than they are, and some in the trade are endeavoring to show from this that the short selling is a great "boon" to the producer. But while this may be true in so far as the present is concerned, dairymen should bear in mind that it will not last. As soon as the dealer has filled his short sales, he is very likely to go to the opposite extreme and endeavor to make up his loss by "bearing" the market and getting the price down as low as possible. For this reason any benefit that shortselling may be to the producer is only temporary, and, tak ing the whole season through, he would fare as well if such short-selling were prohibited.

The export butter trade also shows a very gratifying increase. From May 1st to June 14th the exports of creamery butter from Montreal were 23,372 packages as compared with 11,638 packages for the same period of 1888, an increase of considerably over 11,000 packages. While this is true in regard to the Canadian trade the American butter exports show a decrease of 5,500 packages for the same time. Present prices for June butter are considered reasonable, and large quantities are being bought up on English speculative account. The outlook is considered bright and the Canadian creamery butter trade will, doubtless, experience one of the best seasons it has ever had. An important feature in the situation is the large demand from British Columbia for the mining districts. This, in addition to the large export demand, is making the market lively and trade active.

Seed Growth and Selection A More Detailed Statement of Prof. Robertson's Important Delivery

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on the Subject

In our issue of May 16th we gave a short summary of the evidence given by Professor Robertson before the committee on agriculture in reference to the growth and selection of seeds. Since then we have received a more jetailed statement of what he said particularly in reference to his statements on the second day. At the beginning of his evidence he outlined the great underlying principles which govern the increase of plauts during their growing period. The conditions which make for the increase in the size of the roots, stems, and leaves, do not make for an increase in the grains, fruits, or seeds. An excess of easily available plant food promotes a great growth and enlargement of the vegetative parts of the plants, namely, the roots, stems and leaves. A bareness of available plant food when the plant is near the ripening period makes for an increase in the quantities of seeds.

With regard to the question of seeds he stated that seeds which germinate most quickly are the best and heavy seeds give more vigorous and heavier crops than smaller seeds of the same sort and variety. All plants have a tendency towards variation. When they are changed from one place to another, they make an effort to adapt themselves to the new conditions. Those which succeed most fully in adapting themselves are the best for the locality. Variation in plants was brought about and intensified by a change of seed, by the method of tillage, by cro-sing varieties and the like. Whenever a seed is sown in a locality new to it, if it be suitable, some forms will vary in the direction of adapting themselves to the conditions there; and selection of the seeds from these forms is practically the only means of continuing any improvement of the productiveness of the seed. That is actually a grading up of the seed by continued selection from year to year on the farm where it is to be grown.

He analyzed the reports of the growing of cereals at the Dominion Experimental Farms for four years, and said that in his opinion the comparison of varieties without a continued selection of the best seeds from year to year was of no service to the farmers, and was apt to mislead them into expecting service from named varieties as such, instead of obtaining the seeds by continued selection from year to year on their own or similar farms. Variation in the productiveness of all varieties appeared to he brought about by growing them under different conditions of soil and climate. He gave a number of instances taken from the tests made at the five experimental farms during the season of 1898 to show that there is no inherent superiority in the variety without selection. Of the 195 varieties of oats, barley, spring wheat and peas compared, 138 appeared in the selected lists of the twelve or six of the largest yielders at the five farms. The selected lists included over 70 per cent. of the total number compared.

The only valuable or useful selection of farm seeds was a selection of the seeds from the individual plants which give evidence of power by succeeding and yielding largely under soil and c'imatic conditions where the crop is to be grown the following year. In every field of grain some plants are more vigorous, larger, earlier and more productive than the others. That is evidence that these plants have varied in the right direction for profit making to the farmer. The difference in the same field is due to some form of inherited vigor. The only quality of inheritance in plants for farm crops which is worth naming is the power to overcome obstacles, power to take materials from the soil and the air, and power to hold these and organize them into valuable forms. That is the only quality of inheritance or heredity which is worth naming in any field, the field of the farm or the field of the nation. He recommended every farmer to select enough heads from the largest, most vigorous and early plants in his field to give him two bushels of seed grain, then to select the large seeds from that by the vigorous use of the fanning mill and sieves. Such seed grain would doubtless prove better adapted to the soil and climate of his place than any outside seed he could obtain. Selection in that way from year to year would develop seeds with the greatest vigor for productiveness and also with the quality of the grain improved. Such a course would result in an increase of crop varying from 20 per cent, to 30 per cent., which, if applied to the farm crops of Canada, would