

as the best result of last year's growth, and it is placed by him in the class known as "Extra Hard." This weighs 63 lbs. to the bushel.

(5.) Sample grown at Edmonton, Alberta, by Mr. Donald Ross, which weighs $61\frac{1}{2}$ lbs. to the bushel, appears to be touched with frost, but is graded as "No. 1 Hard."

(6.) Sample grown at Mowbray, Manitoba, by Mr. A. Johnston, weighs $64\frac{1}{2}$ lbs. to the bushel, and has been graded as "Extra No. 1 Hard."

(7.) Sample grown at Guysboro, Nova Scotia, weighing $61\frac{1}{2}$ lbs. to the bushel, and also graded as "No. 1 Hard."

These are the best samples which have been received. Among the others are some of inferior quality, one especially, the poorest sample from Manitoba, was grown at Plum Creek, Souris, Man., which Mr. Ogilvie grades as "No. 1 Spring," the fourth grade of wheat. This weighs $60\frac{1}{2}$ lbs. to the bushel. Whether in this case there has been some mistake in the sample of seed sent, or whether the deterioration has been brought about by some peculiarity of soil, is at present undetermined. The samples received from Ontario and Quebec, owing to the unfavorable season, were imperfectly developed and shrunken, and on this account were not submitted with the better matured specimens for test or grading.

A second importation of Ladoga wheat has been made during the present season and 1,405 sample bags distributed. As this has been sent out in good time for seeding, the results of the tests for 1888 will be looked forward to with much interest.

Among the importations of this year, the following are specially worthy of mention. Onega wheat and Onega oats from lat. 62° in Northern Russia, Petschora barley from lat. 66° , and Polar barley and Polar winter rye from lat. 67° within the Arctic circle. These are believed to be the extreme northern limits at which cereals are grown in Europe in a continental climate. All of these varieties are from the interior of Russia. In addition to a limited distribution in the present settled portions of the Northwest, 150 samples of these cereals from high latitudes have been sent for test to different points in the great Mackenzie Basin.

Early-ripening cereals are also being sought from other countries in Northern Europe, from high altitudes in the Himalayas and elsewhere, and it is hoped that by persevering efforts in this direction, varieties will eventually be obtained which will ripen sufficiently early to relieve the settler in the more frosty districts from the discouragements experienced in the past, and result in the indefinite extension of the limits of the successful cultivation of cereals in Canada, and that thus the experimental farms may become an important aid in the settlement of these distant parts of the Dominion.