

# The Commercial

WINNIPEG, JUNE 4, 1894.

## EXPERIMENTAL FARMING IN BRITISH COLUMBIA.

The British Columbia experimental farm, under the control of the Dominion Department of Agriculture, has been established for five years, and is in charge of Thos. A. Sharpe. The farm is located at Agassiz, in the lower Fraser river valley. The annual report of the experimental farms for 1893 contains a review of the work done during last year at the British Columbia farm. The winter of 1892-93 is said to have been the most severe in 30 years in the western part of British Columbia. During December the thermometer dropped as low as 8 above zero. On January 30 the temperature dropped suddenly to 13 below zero, which is remarkably cold weather for that region. The spring was wet and cold, and vegetation was much later than usual. The first grain was not sown until April 10. Drought was experienced in July and August. Altogether last season was the most unfavorable, says Mr. Sharpe, since the farm was established.

Quite a variety of articles are cultivated at the British Columbia farm, as the climate allows for a wide range of experiments. Fruit is perhaps given the greatest attention. More fruit trees, the report states, were planted last year in the province generally than during any previous year, and the farmers are giving closer attention to growing fruit. The extension of the hop-growing industry is also noted.

Winter wheat is the first crop treated of in the report of the work done at the farm last year. This crop was damaged by high winds in January, which blew the earth from the roots of the plants, and left it exposed to the heavy frost which occurred late in the month. What will strike prairie farmers is the great length of the growing season of the grain crops. The fall wheat was sown on October 19, and headed from June 20 to July 10, being ripe from August 19 to 24. The yield varied from about 9 to 23 bushels per acre.

Thirty varieties of spring wheat were sown in experimental plots on May 5, and were ripe from August 25 to September 2. The yield, like that of fall wheat, was poor, varying from 10 to 23 bushels per acre, while one variety yielded under six bushels per acre.

Twenty varieties of barley were tested, sown on May 8, and were ripe from the 16th to the end of August, the yield varying from 16 to 35 bushels per acre. In oats forty-one varieties were sown on May 17, and were ripe from August 23 to September 4, the yield varying from 30 to 58 bushels per acre. In an experiment with eight varieties of hybrid barleys, the yield ranged from 42 to 111 bushels per acre, but this was on land dressed with fish guano the previous year, for roots. Field peas varied in yield from 12 to 21 bushels per acre.

About twenty varieties of corn were planted, some in rows with drill, and others in hills. This was cut on October 16, and yielded from

8 to 37 tons of green fodder per acre. None of the varieties were ripe when cut. In some varieties the cob was only forming, and in others the ears were well filled, while one variety had reached the glazed state. Broom corn did not reach a stage of maturity to be of any value for brooms, and was only beginning to head on October 16, when it was cut and used for the silo. Mixed grains, composed of peas, barley, oats and wheat, yielded 2½ to 3 tons per acre of dry fodder, and was relished by the stock.

In vegetables, turnips varied in yield from 275 to 618 bushels per acre, in over 25 tests. Mangels varied from 86 to 303 bushels per acre, twenty varieties having been sown. Carrots yielded from 6 to 12 tons per acre, and sugar beets from 2½ to 5½ tons per acre. Thirty-one varieties of potatoes were planted, the yield varying from 80 to 376 bushels per acre. The Bordeaux mixture proved valuable for preventing blight on the potatoes.

Among the miscellaneous crops, three varieties of millets were tried, but proved failures, and none headed out. Hemp and jute were likewise failures, as was likewise a small patch of peanuts. Sunflowers produced over 8 tons per acre of green heads, used for the silos.

Fruit is an important feature of the farm. The apple trees were not damaged by the severe winter, though some varieties were brought from southern regions. A number of the varieties planted in 1890 fruited last year. A large addition was made last year to the apple plantation, including a number of English varieties.

The pear trees were not injured by the severe winter, but the crop was poor. There are 112 varieties of standard trees in the pear orchard. The dwarf pears have not done as well as the standard, the new growth having been injured in the winter. The plum orchard contains 124 varieties, a number of which bore well, though planted only three years ago. In the cherry orchard are 67 varieties. The crop was a failure last year, cold wet weather during the blossoming period having been injurious. The young trees, however, made a vigorous growth and promise well. Sixteen varieties of nectarines have been planted. The new growth of the previous year was winterkilled badly. Apricots suffered similarly. The fig trees were mostly winterkilled, but a number of new varieties have been planted. Peach trees were also badly frozen back, and some died. The curl leaf affected the peach trees very badly last season, but trees on the higher bench land, at an elevation of 800 feet, were not affected with this disease, and they also escaped damage from the severe winter weather to a greater extent than those on the level land. Apple, plum and cherry trees have also been planted on the bench land, and are doing well. About 4,000 Eastern Canada forest trees, including walnut, butternut, hickory, chestnut, ash, elm, cherry, beech, birch, etc., have been planted on the bench land, and are thriving.

Ninety varieties of grapes were planted on the farm, but only three varieties fruited and none ripened. A nut orchard has been planted, containing English and other walnuts, chest-

nuts, pecan nuts, almonds, filberts. Mulberries have also been planted, and all made good growth last season.

The season appeared unfavorable for small fruits, gooseberries, currants, raspberries, blackberries and strawberries all gave poor returns.

In shrubbery and ornamental plants it is noted that most of the roses were winterkilled, but grew up from the roots. Over 30 hedges of different ornamental shrubs have been planted.

## "WHAT IS THE MATTER WITH HANNAH?"

The above threadbare query might well be resurrected and asked regarding the unsatisfactory state of agricultural and commercial affairs over the world at large at present, and especially regarding their state on this continent of North America. It is not the intention, however, to make a mundane or continental diagnosis in this article of "Hannah's" ailment, but to confine its scope to discovering the disease affecting the province of Manitoba, and the Northwest generally, and if possible to discover some remedy, which will mitigate, if it does not wholly cure, the evil or evils existing.

It is a comparatively easy matter to comprehend the causes or the main ones leading to the present depressed state of agricultural affairs in the Northwest, for a look back over market quotations of the past two years will show that prices of such products have been tending steadily downward, until it may safely be said that the crop of 1893 was marketed by the farmer at figures below the cost of production, unless in a few exceptional cases, and that if present market values are to continue any length of time, agriculture must cease to become profitable. But that such values will continue any length of time is not at all likely. Agriculture is now unprofitable, if not a source of loss to all engaged therein the world over, so that this present depression will cure itself in time by a falling off in agricultural enterprise, wherever it is least profitable, and when circumstances are more favorable profit and prosperity must soon come.

That the trading community of this province should suffer during a time of depression in agriculture is only natural, for our merchants are dependent on our farmers. But it is worth a little investigation to see if trade is not suffering at present to an extent not warranted even by the prevailing depression. In short, to see if traders are not themselves to blame for the great bulk of the evils now being borne.

Tariff has had its share of blame for the misfortunes of our traders, and justly too, while railway freight rates have been credited with a big share of the trouble, although in this case the accusation will not stand the scrutiny of a fair investigation, and many of the loudest complaints come from those who are suffering nothing. How the outbound freights on the products of this province have affected the interests of the merchant is a point to be discussed in a future issue as one of the heads of this trouble, but in this issue space will allow only the study of how inbound freight rates affect the trader.