

# The Commercial

WINNIPEG, APRIL 3, 1893.

## EXPERIMENTAL FARMING.

One of the most interesting books which comes from the government printing department at Ottawa is the annual report of the experimental farms. These reports give briefly the results of much experimental work, carefully carried on at the farms. This work includes experiments in agriculture, horticulture, stock raising and feeding, chemical and botanical experiments, etc. A vast amount of practical knowledge is thus gathered, which should be of great value to the intelligent farmers of the country. In addition to the annual report, bulletins are frequently issued, giving more detailed information upon special experiments.

In undertaking the establishment of these experimental farms, some six or seven years ago, the government made a most wise move in the interest of the farmers of Canada. A great deal of work has been accomplished at the central farm, located near Ottawa, and this has been supplemented by the work accomplished at the branch farms in various parts of the country. These branch farms have been located so as to meet the requirements of the varying climate and general conditions, in a country of such vast area as Canada. This great work is carried out under the experienced direction of Mr. Wm. Saunders, with local superintendents in charge of each farm.

The information gained through the work carried on at these farms is first of all of value to the farmers of the country, and our agriculturists should therefore endeavor to acquaint themselves with the results obtained. It is quite as important that the farmers should become acquainted with the information gained, as it is to obtain this information in the first instance. THE COMMERCIAL has therefore advocated the publication and liberal distribution of the annual report of each of the branch farms within the district served by such farm, in addition to the large annual report embodying the work of all the farms. The newspapers publish reports of a good deal of the work done at the farms, but we believe many of our farmers are losing much of this valuable information.

The general annual report of the experimental farms for 1892 has just been received. It is a book of nearly 300 pages, and contains reports of the work done during the last year at the central and branch farms. Naturally we turn first to the report from the Manitoba experimental farm at Brandon, which is under the superintendence of Mr. S. A. Bedford. Grain and fodder crops engage the chief attention at the Manitoba farm, though forestry, horticulture, etc., are not neglected. Last year 159 plots were sown with wheat, 102 with oats and 86 with barley, peas, etc. A little grain was sown as early as April 6, but seeding was not general until April 14, which is stated to be a week later than usual. This would of course apply to that district.

In wheat 103 plots were devoted to tests of different varieties. In the first test 18 varieties

were sown on stiff clay loam, April 20, with common drill, first crop after breaking. The seed was all bluestoned, and there was no smut nor rust in any of the plots. In this test red life stood second in point of yield, giving 40 bushels 32 pounds per acre of wheat, weighing 61 pounds per bushel. Green mountain wheat gave 41 bushels 15 pounds of wheat, weighing 60½ pounds per bushel, and was ripe on August 20, or one day earlier than red life. The wheat to ripen first was hard Calcutta, on August 10, but the yield was only 17 bushels, 45 pounds. Ladoga ripened August 19, and gave 36 bushels, 20 pounds per acre. In another test of 34 varieties, sown on black loam, on April 22, on summer fallow, with press drill, red life stood fourth in yield, giving 37 bushels, 50 pounds per acre. Three other varieties gave 10 pounds each per acre more than red life. These were white cornel, white life, and Pringle's champion. Hard red Calcutta again ripened on August 10, much earlier than any of the other varieties, but only yielded 14 bushels, 40 pounds per acre, which placed it at the bottom of the list. Only three varieties returned less than 20 bushels per acre. On upland prairie, light loam, summer fallow, 31 varieties were sown, red life standing ninth in point of yield, giving 24 bushels, 30 pounds, and the highest was 23 bushels, 30 pounds, this yield being obtained from Defiance. In another test, wheat sown on land manured at the rate of 20 tons per acre, ripened in each instance five days earlier than the same class of wheat sown on land without manure. This is a valuable pointer for those Manitoba farmers who claim that there is no use for manure in Manitoba. If manuring the land will hasten the ripening of wheat as much as five days, as it did in this test, then manure is of great value in Manitoba. Salt and superphosphate of lime, tried with the object of testing its effect in hastening the ripening of wheat, did not seem to have any influence in this direction, though the yield appeared to be very slightly increased. Rolling the land after the wheat was up, did not seem to have much effect in increasing the yield. Another test was made with wheat as to mode of preparing the soil. Spring plowing, sown immediately after plowing, gave 28 bushels, 10 pounds per acre; fall plowing gave 16 bushels, 50 pounds per acre, and summer fallow thirty eight bushels, twenty pounds. This test was made with red life. The summer fallow was plowed once on June 22, and weeds kept down thereafter by a three-horse cultivator. The test showed very much against fall plowing, the theory being that the fall plowed land is in such loose condition that it dries out much more rapidly. In a test with drills and broadcast sowing, the drills returned a considerably larger yield—from two to five bushels per acre more, and the press drill did better than the common drill, by one to two bushels per acre. It may be noted with special satisfaction that all the wheat sown in the different tests, was bluestoned for smut, and all the wheat was free from smut. A special test to prevent smut, however, was made with different preparations. Sulphate of iron, sulphate of copper (blue stone), agricultural bluestone, lime, etc., were tried, three plots of each, with the result that the

bluestone treatment in each case was very successful, the wheat so treated being practically free from smut. Agricultural bluestone proved of considerable value, but was not nearly as efficacious as the pure bluestone. The seed treated with sulphate of iron had less smut than the seed not treated with anything, but the sulphate of iron treatment did not appear of sufficient value to warrant its use. Lime used with bluestone did not appear to have any value but rather had the effect of lessening the value of the pure bluestone treatment. Another test for wheat sown as to date of sowing. Red life sown on April 23rd, yielded 33.20 bushels per acre, and matured in 125 days; sown on May 7th the yield was 36.50 bushels, and matured in 113 days; sown on May 14th the yield was 37.10 bushels, and matured in 107 days; sown on May 21st the yield was 33.30 bushels and ripened in 110 days, sown on May 28th the yield was 29.40 bushels and ripened in 108 days; sown on June 4th the yield was 28 bushels and matured in 103 days. The report of the Brandon farm deals with experiments with other cereals, hay and fodder crops, roots, forestry, etc. We will continue a summary of the report in future issues.

## LAKE OF THE WOODS MINES.

We are informed that a recent article in THE COMMERCIAL regarding the alleged mining boom at the Lake of the Woods, has caused some adverse comment in that quarter. The article seems to have been misunderstood. THE COMMERCIAL said nothing, either for or against the value of the district as a mining country. What we condemned was false cables to British papers, sent out evidently with the intention of influencing the sale of mining stocks in England. These cables were not sent from Rat Portage, which town is headquarters for the Lake of the Woods district, but were dated at St. Paul and other points in the States. We do not know that a mining swindle is being perpetrated, but the cables telling of a great rush to the district, etc., are false, and THE COMMERCIAL said so.

Now, there is nothing which will injure legitimate mining development more in the district, than the perpetration of a swindle, and those who have the best interests of the district at heart, should be the first to condemn the circulation of falsehoods. THE COMMERCIAL did not in that article discuss the merits of the Lake of the Woods district as a mining territory, nor shall we at this time undertake to do so. We said "there is gold in the district, and there may be paying properties there." We will go further and say we believe there are paying properties there. A considerable interest has been taken in the territory, and the development work which we understand is likely to be done in the near future, will further prove the capabilities of the territory. We believe the outlook is more favorable at present for development work in the territory than it has perhaps ever been before. This much is satisfactory, and there are many who believe that the results will prove in every sense favorable to the reputation of the district.