

ation lodged in the heads of the two gentlemen who are furnishing us with information to-night.

Mr. McMILLAN (Huron). I see they have a thresher now on the Indian Head farm.

Mr. CARLING. A tread thresher.

Mr. McMILLAN (Huron). I see that there is \$175 besides paid for threshing. I see that there is a certain amount of furniture paid for. What is that for?

Mr. CARLING. That furniture was bought for an office and for a room to entertain strangers.

Mr. CASEY. I find experiments made in spring wheat with the purpose of introducing new and more productive kinds of wheat. I find a great number of varieties of spring wheat experimented on, one of which brought the tremendous return of four bushels to the acre. The highest return was 20½ bushels to the acre, and not one of the samples weighed 60 lbs. to the bushel while some weighed as low as 50½ lbs. Amongst those were White and Red Fife, two kinds of spring wheat known to farmers for generations and which, owing to the absurd location of the farm and the kind of cultivation received, produced the tremendous return of 18¾ bushels to the acre in the one case and 12 bushels in the other. And the one weighed 55¾ lbs. to the bushel and the other 56¾ lbs. Can anything be more absurd than to conduct a series of experiments for the purpose of showing people that two kinds of wheat they have grown for years can be made to produce such absurd results? Any medium farm in the Dominion could show better results than are shown by this attempt to instruct our farmers as to the kind of wheat or any other grain they should use. Another experiment was with wheat sown in drills 2½ feet apart. I do not quite see the advantage of making experiments in growing spring wheat in this manner. If the results of this farm are to be of any use, the crops there must be cultivated as they would be in practical farming and should show results which a practical farmer could imitate, and not in rows 2½ feet apart. Nine varieties of wheat were sown in this manner on sand loam which was manured in the spring of 1890 with from 18 to 20 tons of stable manure per acre. Each variety occupied 6 rows, covering a space of one-twentieth of an acre. These 9 specimens in 6 drills of 2½ feet apart produced, with the 18 to 20 tons of stable manure per acre, the following results: Campbell's Triumph yielded 5½ bushels per acre. This was Campbell's triumph but not Professor Saunders's triumph. Ladoga produced 7½ bushels per acre and it weighed 57½ lbs. to the bushel. Red Fern yielded 5½ bushels per acre and so on, the highest yield for any variety being 8 bushels to the acre. What, in the name of common sense, was the meaning of these experiments? Wheat planted in drills like Indian corn could not yield any sort of reasonable crop per acre and would not afford any results which would be of any use to anybody. It was one of the fiddle-faddle experiments tried there for what reason I cannot imagine, excepting to furnish material to fill out a report. Even with this hand culture of these kinds of spring wheat, it was impossible during 1890 to raise wheat up to the standard weight on the model farm. Experiments in rye I shall not refer to, out of regard to the feelings of the Minister of Finance. Experiments in winter wheat have

also been conducted on this model farm. The idea would not occur to anybody less thoroughly practical than the Minister and the learned director, of trying experiments in winter wheat in this neighbourhood. Everybody knows that this section is not fitted for growing winter wheat. To spend money, time, energy and science in struggling with the problem of raising winter wheat in this Laurentian country, is something which could only have occurred to the extremely great mind of those who are conducting the farm. I find that the yields were better than those of spring wheat, but still nobody can suppose any results obtained in this peculiar climate of Ottawa would be of any use to farmers even 15 or 20 miles from this most favoured spot. I need not go on to the experiment of mangles, turnips, and so on, as they do not show anything which every farmer does not know from his own experience. The managers of this farm have been going, child-like and blandly, over experiments made scores of years before. They have been repeating old experiments, which every farmer has to make in the course of long cultivation. Experiments in beet-root are of a certain value, as the cultivation of this root is not much gone into and not much known in this country. Experiments in the growth of grain are of very little value. I was over that farm last summer at the time when the crops were ripe. I am thoroughly satisfied, if the farmers of Canada got no better crops than those I saw on the model farm, which is supposed to be the beacon light for the whole Dominion, the practical farmers could not live. It was simply an exhibition of how poor crops could be raised by scientific management on a poor piece of ground. These results are not embodied in the book which is here, which does not contain the results of last summer's operations.

Mr. McMILLAN (Huron). I see there was grain sold from the Indian Head farm. Was that for seed?

Mr. CARLING. Most of it has been sold for seed to the farmers in that neighbourhood.

Mr. McMILLAN (Huron). What system is adopted in selling this grain?

Mr. CARLING. It is charged at from 5 to 10 cents a bushel more than the ordinary price of grain.

Mr. McMILLAN (Huron). Is the quantity limited?

Mr. CARLING. To one bag.

Mr. FEATHERSTON. The other day, in the Committee on Immigration and Colonization, we had a very interesting address from Professor Saunders on experiments, and I think these experiments are very necessary, and I think the people should have the advantage of these experiments. While we were discussing the question, we found that some of the members from the Province of Quebec thought they had a grievance because they did not get a distribution of seeds from the farm in proportion to their population, but Mr. Saunders showed them that they get a due proportion. Now I find that we in Ontario have a grievance, and the hon. member for North Victoria (Mr. Hughes) has shown that the Conservatives have the preference in regard to the two-rowed barley. He says the Grits are growing the six-rowed