the eastern provinces results as we might anticipate in changing the relative positions of some of the varieties as to productiveness.

The six best sorts of two-rowed barley averaged 55 bushels 17 pounds per acre. The best six-rowed sorts averaged 61 bushels 27 pounds per acre. The Royal stands at the head of the six-rowed list, with a yield of 67 bushels 24 pounds, and the Beaver is first of the two-rowed varieties, with 61 bushels 2 pounds per acre. Both of these barleys are the product of cross-fertilization at the Central Farm, Ottawa, and were got by crossing a six-rowed with a two-rowed sort. The twelve best sorts of wheat have given an average of 49 bushels 32 pounds per acre, and the whole of the 71 varieties under trial have averaged 42 bushels 14 pounds per acre.

Pease have given an excellent yield. The best twelve sorts having averaged 58 bushels 51 pounds per acre.

The crop of Indian corn, cut green for ensilage, was below the average, on account of the cold moist condition of the season. The crop of the best six sorts which usually give from 20 to 25 tons only average this year 13 tons 1,150 pounds per acre.

The turnip crop was excellent, the six heaviest croppers having given an average of 47 tons 380 pounds per acre.

Mangels were not quite so heavy, the average of the best 6 sorts was 22 tons 1640 pounds per acre.

Carrots did very well, the best 6 varieties having averaged 29 tons 301 pounds per acre.

The best four sorts of sugar beets averaged 16 tons 1454 pounds per acre. In these tests of roots I think the plots are not any more favourably located than the fields would be and these averages may be taken as a fair indication of what the field crops might give on land of similar quality.

By Mr. Clancy:

Q. The field crops seldom come up to the experimental plots in results, I think ?

A. No; not often, and I think for the reason that it is difficult to find a field in the eastern provinces or in British Columbia that is strictly uniform in quality. Such may be found, I believe, in the North-west.

Q. Can you find such in the North-west ?

A. I think so. In the great North-west plains the soil is probably more uniform than in any other part of the Dominion.

In all countries that have been occupied by trees when the clearing takes place the surface soil is so disturbed and dug over, in rooting out the stumps that the land is made very irregular in quality, and in British Columbia where very large trees have to be taken out, and excavations made sometimes 30 to 35 feet across to get out the stumps, the gravel is turned up and mixed with the soil in such a way as to make the land very variable.

Q. That would not obtain in western Canada ?

A. Not to the same extent. In nearly all the valleys of British Columbia, the alluvial soil is underlaid by gravel and in digging out large trees much of the gravel is raised to the top and that of course depreciates the quality of the soil on such spots.

Potatoes gave remarkable crops at Agassiz where the best 12 sorts produced an average of 661 bushels 5 pounds per acre. The hay crop was also unusually heavy. The crops at the experimental farm at Agassiz may be regarded as fairly indicative of the crops on the farms in the coast climate of British Columbia. It will thus be seen that farm crops all through the west have been very good.

In the east while hay has been an excellent crop and corn for ensilage generally above the average, most of the grain crops have fallen below the average. At the Central Experimental Farm the best 12 sorts of oats have averaged 55 bushels 22 pounds per acre. I may say generally that the field crops of oats have gone nearly 50 bushels per acre, showing very little difference this year between the yield of the trial plots and those had in the fields.