

vity of Vermonters in general, and of one in particular, who ploughed 3 acres of land with a pair of horses in nine hours forty-five minutes. Perhaps it is running over the land in this fashion that has brought the farmers of the State in which this is said to have occurred into such a state of poverty as Dr. Hoskins describes so feelingly in that piper.

However, the manure and rent &c., being added to the total cost of growing an acre of silage, as given above, the amount we arrive at as representing the real cost is \$40.25. We saw that after allowing for the loss of water when the crop lay "in open gables to wilt and dry out a portion of the water," the crop as converted into silage could not have exceeded 28 tons to the acre, which would cost for manure, cultivation, rent, &c., \$1.43 a ton, or more than three times as much as the Station calculation made it out to be! All these experiments are conducted in a very one-sided fashion—not intentionally, of course—but we shall never reap any benefit from state-aided stations until the managers are selected from perfectly unprejudiced men—a class very difficult to find at any time. One should ask oneself the same question, before beginning an experiment, that is asked by the counsel when a Juror is objected to on a panel: Have I formed any opinion as to this question that is about to be submitted to trial? For instance; *I—moi qui vous parle—I* should not like to begin a trial of the relative productive powers of the Jerseys and the Guernseys. I feel that, however much I might try to be fair in my dealings, if a doubtful point arose in the competition, all my earnest desire to act uprightly would be overpowered by my—prejudices, if you like to use the word. And so of other matters.

Cost of harvesting and filling.—The capacity of the chaff-cutter employed in the preparation of the silage was 50 tons a day, and the cost of wages, teams, coal, &c., amounted to \$21.56 for the ten hours during which the work was carried on daily; making the entire expense equal to 43c a ton! Here, again, no charge is made for interest of money—cost of the silo, of the engine, the chaff-cutter, &c.; and, as a very old employer of agricultural steam engines of the best construction, I must be allowed to say that 400 lbs. of coals is a very small allowance for ten hours work. Anyhow, this 43 cents a ton, added to the \$1.43 a ton which we saw was the true expense of the cultivation, brings the real cost of the silage to at least \$1.86 a ton, instead of, as given in the report, 88 cents!

Mr. Fisher, in his address to the farmers of Huntingdon, said that he estimated the value of good corn-ensilage at one-third of the value of a ton of hay = \$2.66. So, even at my computation, three times the cost of a ton of ensilage being only equal to the value of rather less than three-fourths of a ton of hay, a crop of ensilage of 28 tons of wilted corn to the acre must be one of the most profitable crops grown on the farm, (1)

Of all the kinds of corn grown for the experiment, the best seems to have been the "Canada Flint." The following analysis is worth reading:

Canada Flint corn. Table No. 3.

Per centage of digestible matter.

Albuminoids.	Fibre.	Carbohydrates.	Fat	Yield per acre of digestible matter, 6,706 lbs.
2.94	3.92	24.33	86	

(1) I am supposed to be opposed to the silo-system. This is a mistake I only wish to prevent people from rushing too quickly into a system which may induce them to hope for impossible profits from an acre of land, and to neglect other equally valuable crops for the sake of one which is doubtless very fascinating. Mr. Sprague, of the Ontario Agricultural Association, puts the value of a ton of ensilage-corn at \$7.00!!!

A. R. J. F.

The enormous per centage of albuminoids and of carbohydrates in this corn leads the managers to the following conclusion: "The very high per centage of Carbohydrates found in the *Canada Flint* in comparison with the other varieties of Flint-corn, would indicate the presence of some unusual conditions rather than extra feeding value, and these facts (*what facts?*) can only be determined by a repetition of the experiments." So they reject the *Canada Flint* altogether, not even noticing that its albuminoids are also greatly in excess of all the rest. (1)

"The tests of the laboratory and the feeding-stables do not agree as to the value of ensilage." And the eyes of the *agronomes* are beginning to be opened to the same idea as regards swede turnips!

Well, the experiments above noted seem to have been highly satisfactory, and I hope they will be continued for several years. It is a most difficult pursuit is this of conducting experimental stations, and those at the head of them deserve great credit for the patience and energy they display in their work. Nothing can be more pleasing to an experimenter than to find that he is on the right road, but most annoying contre-temps will occur, and upset all his calculations. Chinchbugs, grasshoppers, &c., devour his plots, and plants seem to take a perverse delight in behaving badly. For instance; here is an experiment tried with two kinds of mangels, the Norbiton Giant—a long red and a monstrous cropper—and the orange Globe—a moderate cropper, but of first rate quality.

	Weight of each root, in oz.	Pounds per acre.	% of sugar.	Gravity of juice.
<i>Mangel Wurzels.</i>				
Norbiton Giant.....	414	60,258	5.5	1.044
Golden Globe.....	83	119,064	4.1	1.020

The above is the analysis for sugar: the following is the analysis of the same roots considered as food for stock:

NAME OF VARIETY.	Analysis of the green root.			Analysis of the dry substance			
	Per cent. of water.	Per cent. of dry matter.	Per cent. of cellulose.	Per cent. ash.	Phosphorus in ash.	Albuminoids.	Starch, sugar &c.
Golden Globe.....	87.8	12.2	7.43	11.12	.45	16.63	64.82
Norbiton Giant	88.7	11.3	7.93	12.55	.36	16.62	62.90

Thus the weaker cropper doubles the yield of the giant mangel, as well as beats it in every valuable constituent: containing 1 % less water, less crude fibre, less ash, but more albuminoids, more carbohydrates, and more phosphorus in the ash. I should have expected the yield of the long-red-mangel to have been, on the Minnesota Station soil—a self-drained clay-loam—at least 50 % heavier than the yield of the orange globe.

DE OMNIBUS REBUS.

June 8th, 1888.

Agriculture in Britain.—I see by my exchanges that farms are in demand again in England. A trustee, too, of

(1) We are glad to state here that the Quebec flint corn is to be extensively tried and thoroughly analysed at the Minnesota Experimental farm during the coming season.

Ed. A. B.