

gain in sound tubers from the use of the Bordeaux mixture is shown, the average gain per acre being 2 tons 1 cwt.

Complete chemical manure—namely, a mixture of nitrate of soda, superphosphate of lime, and kainit—gave the heaviest and most remunerative result. The average yield per perch, on four perches each, was,—

	cwt	qrs	lb
No manure.....	1	2	1
Farmyard.....	2	1	2
Complete Chemical.....	2	1	15

Experiments with different qualities of manure proved that the crop was increased by increasing the manure and the heavier dressing of 12 cwt. to the acre of complete chemical manure was remunerative. It was further demonstrated by another series that neither nitrogen, potash or phosphates could be omitted from the manure without loss. Deep cultivation in the preceding autumn yielded, on three plots, a considerably increased crop

At the fields station on the Boreham road, twenty-four varieties were planted with the plough, in 20 acre sections, on the same land, and were similarly treated. Appended is a table showing the results obtained.

The total crop of sound and diseased tubers raised on the twenty-four plots (1 a. Or. 32 p.) was 16 tons 6 cwt., equal to 13 tons 12 cwt. per acre, and the relative productiveness of the different sorts is shown in the first column of the subjoined table. The gain or loss from spraying, calculated from the weights of sound tubers on the sprayed and unsprayed portions of each plot, is given in the second and third columns. The percentage of diseased tubers on the sprayed and unsprayed are as of the plot is also added:—

VARIETIES OF POTATOES AND RESULTS OF SPRAYING.

Variety.	Total crop per acre.	Effect of spraying.	
		Gain per acre of sound tubers	Loss per acre of sound tubers
	tons cwt.	tons cwt.	tons cwt.
1 Sirius.....	18 13	5 3	—
2 Imperator.....	16 4	5 3	—
3 Daniel's Early Crimson Flour Ball.....	16 1	2 15	—
4 Blue Giant.....	15 18	all	prayed
5 Carter's Surprise.....	15 13	3 3	—
6 Carter's King of the Russets.....	15 0	2 2	—
7 Daniel's Dreadnought.....	15 0	1 8½	—
8 Reading Giant.....	14 15	—	0 4½
9 Webb's Stourbridge Glory.....	14 11½	1 17	—
10 Fidler's Colossal.....	14 8	2 13	—
11 Sutton's Triumph.....	14 6	3 7	—
12 Magnum Bonum.....	14 3	2 15	—
13 Bruce.....	14 2	1 0½	—
14 Maincrop.....	13 15	1 17	—
15 Reading Russet.....	12 16	2 ½	—
16 Sutton's Supreme.....	12 15	0 19	—
17 Schoolmaster.....	12 2	3 16½	—
18 White Elephant.....	12 1	0 15	—
19 Windsor Castle.....	11 18	—	0 4
20 Anderson.....	11 7	2 4½	—
21 The Daniel.....	11 0	0 10	—
22 Simson.....	10 18	0 19	—
23 Sutton's Satisfaction.....	10 15	1 0	—
24 Webb's Early Beauty.....	9 1	1 18	—
Average.....	13 12	2 1	—

A law has just been passed in France to authorise the creation of agricultural credit societies, on similar lines to those advocated for England by the Agricultural Banks Association.

The November report of the American Department of Agriculture does not give any fresh information about the wheat crop, concerning the quantity of which there is a wide difference of opinion. The yield of maize is put at 19.7 bushels per acre, or less than that of any year since 1881. In 1893 it was 22 6; in 1892 22.4; and in 1891, 26.6 bushels per acre. The yield of potatoes is estimated at 62.3 bushels per acre, or nearly ten bushels less than last year's crop. The tobacco crop appears to have turned out well, 733 lb. per acre being the average, as compared with last year's yield of 695.3 lb.

We hear that within the past few days two consignments of pleuropneumonia have reached English ports from the United States of America. One cargo of cattle landed at Newcastle and another at Deptford has each been found to contain an animal affected with the disease in a most pronounced form, and it is expected that as slaughter of the remaining animals proceeds others may be discovered to exist.

A nice little estate.—Sir Watkin Williams Wynn, of North Wales, is, with his wife's property added in, the owner of 137,025 acres of land; in addition to which trifling property, he enjoys marorial rights over the manors of Arwystloy, Cyfeiliog, and Talerddig, covering some 180,000 acres. The rents of this estate do not amount to much, as 64,819 acres are rough mountain land, only \$227,290 a year, and as Sir Watkin has to keep a pack of hounds, and to subscribe to various societies, clubs, and charities, to say nothing of keeping up a large establishment at Wynnstay and an expensive town-house, he cannot, poor fellow, be a rich man!

The Watkin Wynns, however, are pretty good landlords as landlords go, that is the tenants are not often "disturbed" in their holdings, as the following extract from the evidence of the agent of the property, before the

"Welsh Land Commissioner" would go to prove; we condense, of course. In one parish on the Glanlyn estate, there are seven families who have averaged 232½ years on their respective holdings; in another parish, three families with an average of 333 years. No need to ask for legislation giving 'security of tenure' on such a country-side as this. And there are lots of small farms, varying from 5 to 25 acres; so that the industrious ploughman, shepherd, and other labourers, could have no difficulty in finding a chance to rent a farm, were it not for the pertinacity with which the tenants stick to their holdings.

Variation of prices.—Talk of the fall of prices in the wheat-market; why, that is a mere trifle compared with the fall of prices in the cotton-trade! In 1814, a few months previous to the Battle of Waterloo, American Upland cotton sold, at Liverpool, for 70 cents a pound; the same quality can now be bought at the same port for 6 cents a pound!

Nitrate of soda is now worth £ 9 a gross ton at Liverpool. This is equal to about \$40 00 per 2,000 lbs, which makes nitrogen in England worth 12½ cents a pound.

Superphosphate of lime will be very low in price next spring—in England, not here we fear.—High grade Florida phosphate rock has fallen considerably, owing to low Atlantic freights.

Kainit is only worth some \$10.00 a ton of 2,000 lbs., in bags, f. o. b. at Liverpool. As the dose per acre is only from 400 to 500 pounds, it cannot be called a costly dressing in England. What it can be had for here is another thing.

Bone-dust or meal, is to be had here at a reasonable price: perhaps \$28.00 per 2,000 lbs. is about the figure. Will any one try an acre of swedes this next season with

400 lbs. bone-dust; }
200 " nitrate-of-soda; } Cost, \$9.00
200 " superphosphate }
of lime.

No dung; therefore no extra weeds.

To Make a Pound of Gain.—Prof. Sanborn found on an average a certain amount of food was required for pigs weighing 35 lbs; 3.3% more food was required to make the same gain on pigs weighing 70 lbs; 14% more on pigs weighing 125 lbs; 19% more on pigs of 175 lbs; 22% more on hogs of 225 lbs and so on up until 71% more feed was required on hogs weighing 355 lbs. The period for most profitable hog feeding is before 200 lbs weight is attained.—F. & N.

Foreign Potatoes of the Scotch Magnum variety are in transit and expected to arrive in New-York this week. This will be the first consignment this season from Great Britain. The competition of foreign grown potatoes has been considerable in former short crop years, of course affecting chiefly the seaboard and large interior markets. Total imports of potatoes, largely from Canada, were 2,507,000 bu during the first 7 months of this year, compared with 3,571,000 bu for the corresponding period one year ago. For the fiscal year ending June 30 the total imports from all countries were \$3,002,57 bu compared with 4,317,000 bu the preceding year. Of the total last named Scotland furnished 1782,350 bu at an average value of 56c.

SOREL.

Not having had an opportunity of visiting the City of Sorel for a year, and being desirous of seeing how our old friends there were getting on, we left Montreal by the *Three-Rivers* on October 9th, and were safely landed at the port of our destination the same evening, but too late to see anything of the farms till the next morning.

On the 10th, we began our tour of inspection with a visit to our old friend and pupil, M. Séraphin Guévremont, whom we found, as usual, hard at work among his crops. As we had sent him, in the previous spring, a few bushels of *Prize-cluster* oats, we naturally sought information as to their yield and quality. They had, we were glad to learn, turned out remarkably well, in both points, having produced at least 20% more to the arpent than our favourite *Black-Tartars*; which, by the bye, shows the advantage of a change of seed, though it is very hard to get this idea into the heads of the *Sorelois*, who generally keep on sowing their home-grown seed year after year without change. And the effect of this persistent repetition is emphatically visible in the case of potatoes in this district: all the large and middle-sized tubers are sold or consumed at home, and the "chats," as the small ones are called in the S. E. of England, are used for seed instead of being given to the stock.

We, therefore, were very glad to find that a couple of bushels of *Early Puritan* potatoes that Mr. Evans, by our instruction, sent to M. Guévremont, had yielded very well indeed; not that this kind can even be expected to turn out such crops as the *Beauty of Hebron* or the *Early-rose*, for it is, like all earlies, a small sort; but the tubers were very regular in size, very few eyes and those unobtrusive, and with an excessively smooth skin. Trying a few by careful cooking, a day or two ago (November 25th) we were confirmed in our opinion that the *Early Puritan*, like the *Ash-leaved kidney*, is to be used in accordance with its natural gifts: not to be eaten after the end of July. M. Guévremont does not grow so many potatoes now as he used to grow, and he is quite right, for, with all its good qualities, the *Sorel* sand does not turn out a good sample of potatoes, and, owing to the nearness of the water to the surface, if there is any disease about, the *Sorel* potatoes invariably suffer from it acutely.

The general root-crop on the farm was, as it invariably is, superb: it always does our heart good to see it. The swedes, of which there were about six acres, were as regular in plant as swedes can be; singled out about ten inches apart in the rows, and two feet between the drills. This would give about 26,000 plants to the imperial acre, and as many of the swedes weighed 9 lbs., topped and tailed, and there was apparently not one less than 3 lbs., the number of tons to the acre must have been pretty large. Allowing for some late-sown ones, and making all proper deductions for miss-plants—for however regular the plant may appear to be there are always some drawbacks of this kind—; we could not put the crop at less than 30 tons an acre. Strange, how, this soil suits the swede; yet that plant generally prefers a stronger soil! And it is the same thing, in a wet or a dry sea-on.