The pea land (and the oat land if both crops can be removed early), offers an opportunity of waging successful war with thistles, especially if the land be very dry, which is often the case, by immediate cross-ploughing and ridging up before winter.

Section 6. Sixteen acres wheat or barley.

It will be found convenient that these sections should adjoin each other as much as possible in the order of their numbers. Under this plan, or one akin to it, "Enquirer" might soon make havoc with the thistles which disturbed him so much, and would become practically convinced that the expense and trouble of the first section had been successfully applied with greater results than the mere destruction of thistles, and that the systematic operations through which they and all other weeds had received so great a shock, had also been the means of enriching his land, to say nothing of the simplification in the management of the farm thus introduced.

PRACTICALLY SUBDUED.

In illustration of the efficacy of the systematic course of culture recommended allow me to give the results of my own practical experience.

Seven years ago, at the age of fifty years, I gave up a business in the heart of a British city, and, with the slightest acquaintance with practical agriculture, came to this country and plunged forthwith *in medias res*, as a "book farmer." Since the first year, which was one of not much method, I have followed the course indicated in the former article as closely as the wretched circumstances of the farm would admit of; always, when I could not absolutely adhere to it, bending my arrangements towards it as a cherished object of full eventual attainment; and the amelioration thus effected may be indicated by a comparison of the former and present yields of the principal crops. My plans have again been much deranged by the purchase of an adjoining farm (grievously be-thistled), which I am bringing, bit by bit, under the rotation, along with the second course upon the old farm. The contrast of the two farms is painful to look upon, *mais nous changerons tout cela.*

	First Year.	1869.
Spring Wheat.	10 bushels.	26 bushels.
Barley.	24 "	50 "
Oats.	30 "	61 "
Peas	12 "	Destroyed by blight.
Turnips.	250 "	650 "
Indian Corn.		100 in cob.

A large portion of the wheat land produced this year over thirty bushels per acre. The oat crop was so heavy as to be all lodged, the yield being greatly diminished thereby, besides much waste in the field.

Of the clover, for want of an accurate estimate, I can only say that the first year's growth was ridiculously small, and that the quantity last year was exceedingly great. The above improvement has been brought about by one course only; the same treatment will, of course, continue effectual for many years, and may be rendered yet more so by thorough underdraining.

The tone of "Enquirer's" letter seems to indicate that he has been badly smitten with that spurious economy which prevails amongst us so largely, to the great injury of this country, and to which I have already alluded. It has had, as sickness will have, a depressing effect upon his nerves in view of minor difficulties. I must venture, however, to present to him one more draft upon his slender stock of faith in high farming. The best results cannot be reached (in the sense of profit) under the best scheme of tillage, unless all the Indian corn, oats, peas, hay, and roots are consumed upon the premises, or an equivalent be supplied by drawing manure from the towns, and the use of artificial manures. It is manure thus made that renders hoed crops profitable in fattening animals, and in the raising of grain crops. To sell them off the farm without an equivalent in return is really selling a part (the best part) of the farm.

I feel so much indebted to Stephen's "Book of the Farm" that I must, before I close this communication, very earnestly recommend it to all farmers. It may be got at Toronto. It is costly, but so it would be to open a gold mine. The most experienced farmer may read it with pleasure, and consult it with profit. The young farmer should devour it.

In conclusion, I will express my conviction, that generous and systematic treatment of land, a knowledge of principles, a courageous, persevering, energetic application of them, and capital, are essential to good and really profitable farming; that the more of these qualifications a man can bring to the work the less needs he to be frightened at thistles at starting, or to yield to misgivings about satisfactory pecuniary results; and that he who has them not in a fair degree should consider well before he commits his fortunes to the exhausted lands of the old clearings; for more or less exhausted or run out, and greatly out of condition, a large proportion of them are, especially when they come to be offered for sale.

BOOK FARMER.

Potato Produce.

Mr. Frederick Membery, of Bath, Ontario, sends us the following notes of his experience with a few varieties of potato during the past season. He says that with him the yield was as follows per acre:

Gleason.	600 bus.	No rot.
Cuzco.	630 "	One-third rotten.
Early Goodrich.	500 "	No rot.
Garnet Chili.	200 "	No rot.

Of the Early Goodrich the account was not so correctly kept as of the others, the potatoes being dug as they were required for use throughout the season. About seven pounds of Early Rose were planted, which yielded five bushels, none rotted.

Chemical Manures.

Some time since, we drew the attention of our readers to a series of experiments then progressing in France, which were intended to ascertain the relative value of chemical manures, as compared with the best barnyard or stable manure, not that it was intended either to deny or doubt the benefit to be derived from farm-yard or stable manures, but for the purpose of finding substances that might supplement and assist their action. In France, as in Canada, farm-yard manures are not produced in sufficient quantity to meet the requirements of the farm, and the originator of the system, a Mons. Geo. Ville, determined to go back to first principles, and see if he could not ascertain what the true source of fertility consists in. He therefore established a series of experiments, in which he at first made use of burnt sand, well leached and washed, so as to deprive it of every particle of natural fertility and vegetable organization, as his ground, and proceeded to use as his manures for that ground the pure mineral salts of lime, potash, soda, nitre, and the phosphates. These were reduced into a soluble state, and added to his burnt sand in various proportions, until he by almost innumerable experiments adduced the fact that grain and other crops of every kind could be produced in full perfection without one particle of earth or clay, or of natural manure or decaying vegetable matter, but with purely chemical elements alone. He proceeded with these experiments for many years, until he satisfied himself of the particular chemical substance wanted by each class of plants; and concluded, moreover, that while each class required certain quantities of all the above elements, they required especially a large portion of some one of those elements. He ascertained the exact amount each kind of crop would extract of these various chemical elements from the soil of an acre of land, and having ascertained the expense at which the chemical elements could be produced, he determined the cost and the profit of a crop so manured, as compared with a similar crop grown with ordinary manure. As no man with less than the fortune of a prince could afford the time and means to carry out such a series of experiments, it was made a national matter, and the funds requisite were supplied by the Emperor of the French. Meantime, the projector of these improvements made his plans known in a small treatise, most unfortunately entitled "High Farming without Manure," and he set forth the results of