—animal or vegetable—the more healthy and the better able to resist disease is the offspring. Acting on this principle, I planted potatoes intended for seed for the following season, with little or no manure. As soon as they were ripe, I took them up, and left them spread on the surface till perfectly dry; if they even became green from exposure to the rays of the sun, it is of no injury to them for seed. It would make them unfit for use as food; but for seed it would make them more secure from disease. I then pitted them carefully till spring. For several years I experienced the advantages of pursuing this system. My seed potatoes were always sound, and it was a great *precentative* from degenerating. I also found that a loam or peat soil gave the best seed potatoes. And I planted them whole and of medium size for my seed crop. Ass't Ed.]

WHEAT LANDS.

The *Journal of Chemistry* says:—In the eleventh century the average production in wheat per acre in England was stated to have been only six bushels. To-day the average in England is twenty-seven bushels. This progress is due to our having more knowledge about agriculture. We know more about soils, about implements, manures, &c., than in olden time. One reason for the advancement we see, is the improvement of our agricultural implements. Thus the plow has been wonderfully improved over what it was in Europe in the middle ages.

It is knowledge that men want. The difference between England of five centuries ago and of to-day, is a difference in knowledge. Knowledge has enabled England to multiply many times the product of agricultural operations, and also to multiply the number of human beings she can support. Much of this knowledge is traditional, but it is also preserved in the records—the writing of those who have studied those subjects.

In England to-day there are no exhausted lands; they are not allowed to deteriorate. What is taken off is supplied again, and this is the only true economy. We cannot take away from our land, and not restore, without injuring the soil.

Russia, unlike England, seems to be following in the footsteps of this country in the neglect of her wheat lands, and as a consequence, complaints are already being made that the average yield of her grain crops is constantly growing less. There, as the *Scientific Press* says, as is the case in California, valuable farmyard manure is, in many places, being conducted to the nearest waste ground or stream as a nuisance. Still Russia is buying largely of reaping and thrashing machines, as well as other agricultural machines.

HOW MONEY IS MADE BY FARMING.

Much labor is done on farms that is not farming in the true sense. By such labor no money is ever made. A man may support himself and his family, keep out of debt, and have a few dollars in his pocket by practising the most stringent economy. If he is otherwise than industrious and sober, he is on the down grade with loose brakes, and the end is soon reached. But farming, in its true sense, is a profession equal to that of the law or medicine, and needs equal study, mental capacity, and intelligently directed labor to command a success in it. The principles which underlie the practice of the true farmer must be well understood, and a steady, consistent course of operations must be followed. Having thoroughly learned the nature and capacity of the soil he possesses, and chosen the rotation most suitable, and the stock to be most profitably kept on it, he does not swerve from his chosen course, but in good markets and bad raises his regular crops, and keeps his land in regular increasing fertility. No special eye tempts or affrights him. He does not talk dairying this season or crops the next, but, doubtless if any particular product be in demand and brings a good price, he has some of it to sell, and reaps a share of the advantages. He saves as much money as some men make by care and economy in purchasing and preserving tools, seeds, manures, and machines, and his business habits and constant readiness for all occasions gives him reasonable security against the effects of adverse seasons and bad weather.

ENGLISH CROP PROSPECTS.

The following extract which we condense from the London Field of July 27th, is interesting; as corroborative, from another and later source, of the information on this subject already published:

We cannot congratulate the farmers on their prospects. Pastures, it is true, are so full of grass that cattle cannot be bought to graze them down; but, as a rule, cattle, though surrounded with plenty, have not justified expectation—the weather has been too unsettled and the grass too watery. Foot and mouth disease of a severe type is very prevalent and increasing. We want sunshine to mature everything. The last fortnight has shown a great improvement, and immediately the newspaper authorities are speaking hopefully. The sunshine of July is to make good the injury done in May and June. We are thankful for such weather as we have had lately—without it much of the cereal crop would have been worthless; but we cannot delude ourselves into the belief that we can have an average crop of wheat. Barley, which occupies an unusually large area, having been planted instead of wheat in many instances, promises badly on most soils, but especially on strong land. Oats are generally good, and, with fine weather, will be the redeeming feature of our cereal harvest. This crop stands moisture well, hence its growth in the more humid districts in the northwest of England and Scotland. Leguminous crops are promising where clean, but the aphis has made its appearance in some cases, and may do much mischief. Even the root crop, which was generally got in under favorable conditions, and came away from the fly rapidly, has suffered from the rain. Harvest will be later than usual by two or three weeks.

FARMING PROSPECTS IN VANCOUVER ISLAND.

To those engaged in farming everything connected with their pursuit must be interesting, even though it be in a foreign country. The farming in Vancouver Island must be the more interesting as it is part of the Dominion, with every province of which our interest is one. We give the following article on the subject extracted from the report of Mr. James Richardson, geologist:—

The vegetable soil which has been mentioned seems to be of a very productive character, and whether in the forest, the field, or the garden, appears, combined with the favorable climate, to yield large returns. In the Comox district, about 140 miles from Victoria, as already stated, the soil is spread over a very considerable area of prairie country, commonly designated an opening, extending from the coast up the different branches of the Courtenay river for seven or eight miles.—The surface of this district, which is naturally free from timber, with the exception of single trees and stumps, chiefly of oaks (Quercus Garryana) and strips of alders (Ainus Oregona) in the bottoms, may be some twelve square miles, the scenery of which is picturesque and parklike. Its margin is very irregular in shape, and it is surrounded by a growth of very heavy timber, among which are the Douglass pine (Abies Douglasi) often attaining ten feet in diameter and 200 feet in height, half of which is free from branches and the cedar (Thuja gigantea) often equally large. The open country in its natural state is mostly covered with a growth of ferns, which sometimes attain a height of ten feet, with stems three-quarters of an inch in diameter and roots descending to a depth of three feet. These roots the native Indians prepare in some peculiar way for winter food, and excavate deep trenches to obtain them. The farmers are under the necessity of grubbing up the fern roots before the ground is ready for use, and they are often voluntarily assisted by their pigs in this operation, these animals, it is said, relishing the fern root as food. I was informed by Mr. John Robb and Mr. John McFarlan, two partnership settlers of the district, that the average yield of land after it is cleared and thoroughly under cultivation is of wheat, from 30 to 35 bushels per acre; barley, 40 to 45 bushels; oats, 50 to 60; peas, 40 to 45; potatoes, 150 to 200; turnips, 20 to 25 tons. Some of the turnips exhibited by Mr. Robb at the agricultural show are said to have been remarkably heavy, but those of the Swedish and yellow varieties, seen by me, I consider rather small. The season, however, was said to be an unusually dry one. The yield of Timothy hay is said to be about two tons per acre.—Clover thrives well and rye grass is valued for its after crop.

The yield of butter per cow after calf feeding is about 150 lbs. annually, the ordinary selling price being 30 cents per lb. Cattle generally require to be home fed from the beginning of December to the middle of April. Snow seldom lies long. Heavy falls sometimes occur, but generally disappear in a few days. Once or twice snow has remained on the ground for two months. Apples, pears, plums, cherries, white and red raspberries, red, white and black currants, and most kinds of fruit thrive remarkably well. Some apples, of which I obtained samples, measured thirteen inches in circumference, and weighed nineteen ounces. They were high flavored and well adapted for eating and cooking.—Of the pears many measured eleven inches in circumference, and were high flavored and juicy.

At Gabriola, prairie land or openings such as those already described at Comox occur. More of them are met with on Saltspring Island, but in neither place of the same extent as at Comox. Mr. Griffith, one of the settlers at Saltspring, informed me that the fall wheat thrives well there, and yields from 35 to 40 bushels per acre. Of other grains the yield seems to be about the same as at Comox. In Mr. Griffith's garden there was a large plot of common winter cabbage, the solid heads of most of which measured from three to four feet in circumference. Red cabbage and cauliflowers were equally large and sound. Carrots and parsnips were large, as well as onions, and there was abundance of tomatoes and of several varieties of gooseberries, which did not seem to thrive so well at Comox. Mr. Griffith informs me that at Saltspring the bushes give in quantity and quality a crop equal with the best English. The crops of all the varieties of currants and raspberries in quantity and quality vied with those of Comox.

Mr. Griffith's orchard occupies about two acres, and has been set out only three or four years. I saw different varieties of apple, pear, peach, plum and cherry trees, and the proprietor informed me that all kinds bore fruit last year. The apples are excellent in quality, and the pears, though not large, were equal in flavor and juiciness to any I have ever tasted.

Mr. Griffith has about 300 barn door fowls, which are fed on the grain of the farm, and enable him to supply a great abundance of eggs to the Victoria and Nanaimo markets, where they sell for 25 to 40 cents per dozen.

At Fulford Harbor, Mr. Theodore Frago showed me a pumpkin which measured 32 inches in length, with a diameter of 15 inches at the small end, and 22 inches at the other; and he informed me that larger ones had been used before my arrival. The Settlements of North and South Saanich, as well as of other districts near and around Victoria, show a good deal of prairie land, "oak openings," as they are called in that part of the country, from the greater abundance of trees of this species than elsewhere. In these oak openings many beautiful farms are met with; the soil and aspect of them resembling those of Comox. In addition to the grain, fruit and vegetables enumerated elsewhere, the hop vine has been introduced in North Saanich, and in the neighborhood of Victoria. In the former place Mr. Isaac Cloake and Mr. Henry Wain, with some others, have each a hop orchard, as it is there termed, of several acres in extent. Mr. Cloake, who spent nine years amongst the hop fields of Kent, England, informs me that his hops are quite equal, if not superior, to the English, which, according to him, was tantamount to saying that they were the best on the face of the earth; and Mr. Wain, who likewise had practical experience, stated that in regard to aroma they were equal to the best he knew. They are of the variety known as the grape hop. It was introduced from California, and is said to have greatly improved in British Columbia.

The yield of hops is here from 1000 lbs. to 1700 lbs. to the acre, and it brings in the Victoria market from 22 to 60 cents per lb. When railway communication is established, the article may become one of trade between the two provinces, for if I am rightly informed, the hops imported from England are superior to any raised in Canada.

Other settlements of a similar character to those described are established between Saanich and Nanaimo, which I had no opportunity of visiting. Near and around settlements possessing farms such as mentioned, in many places rocky hills rise up to heights of 1000, 2000 or even 3000 feet and more, the surface of which is in some parts craggy, but in others they present patches with a thin soil, covered with a firm short bunch grass on which sheep and cattle thrive well, for such of them as I saw there appeared to be in good condition. The temperature is cooler in such places than in the lower and more level country, and during the heat of summer they afford excellent pasturage, which will much assist the industry of agriculturists. Along the coast and in the interior of Vancouver Island, as well as on those of the archipelago surrounding it, many localities for farms similar to those which have been here described will be discovered and hereafter become the homes of thousands of a hardy and industrious people.

RYE FOR PASTURAGE.

A correspondent writing to an exchange on the above subject, says:—

I would like to make a few suggestions, through your valuable paper, to my brother farmers upon the value of rye for fall and spring pasture. In this part of the State, where we have so little tame grass, our pasturage in Sept. and Oct. is as short as it is abundant at this season. Every farmer feels badly the want of something green for his stock, especially milch cows. I think rye will supply the want to a very great extent. I think it will pay the farmer well to sow as early as August, as he can use it fall and spring, and then plow up and cultivate to corn if he does not wish it for the crop.

SHEEP ON LOW GROUNDS.

It is generally believed by farmers that low wet land is very unfavorable for sheep. I have kept a flock for four years in a pasture of this description—for the first two years with unfavorable results. My sheep were unhealthy, and many of them died. I ascribed it to the wetness of my pasturage. Upon the recommendation of an old farmer, I gave the sheep charcoal mixed with salt. The beneficial effects of this mixture were soon apparent. My sheep presented a more healthy appearance. I have continued the treatment and the animals have continued to thrive. I suppose the medicinal qualities of this mixture consist in the disinfecting property of the charcoal. And in the invaluable tonic and alterative properties of the salt, we may add; for, like many other remedial agents, this article, when given in small doses, augments the digestive functions. In larger doses it is cathartic.

SOILS—HOW EXHAUSTED.

We frequently see in Eastern Agricultural journals long dissertations on the subjects of deep and shallow plowing, and in most cases the attempt is made to show that the general deterioration so common to most of the soils of those long cultivated parts of the country, is owing to a persistent course of shallow plowing.

It is a mistake to imagine that this alone has produced the unwelcome result, rendering large districts of country unfit for the culture of wheat, which fifty years ago gave an average of from 15 to 20 bushels to the acre. If shallow plowing has had the effect to lessen the annual yield devoted to constant tillage, without the return of some fertilizer—which we will not dispute—it might be inferred that we believed had the field been deeply plowed, there would have been more deterioration.